5.0 COMPARATIVE EVALUATION OF ENVIRONMENTAL IMPACTS

5.1 INTRODUCTION

This section includes analysis of the changes in the proposed JAMF Master Plan as compared to the original analysis in certified EIR 564. As noted in Chapter 3.0 of this Supplemental EIR, certain design and layout aspects of the 1996 Master Site Plan have been changed in the JAMF Master Plan. However, the fundamental characteristics (jail uses and accessory uses) and capacity (7,584 inmates) of the 1996 Master Site Plan remain as originally approved by the Board of Supervisors in 1996. In addition, the analysis incorporates by reference other environmental documents relevant to the JAMF Master Plan, the proposed plan. The original JAMF Master Site Plan analyzed in EIR 564 will be referred to as the 1996 Master Site Plan. This comparative analysis has been undertaken pursuant to CEQA to provide the County with a factual basis for determining whether changes in circumstances or setting, or new information since EIR 564 was certified, require additional environmental review or preparation of a Subsequent or Supplemental EIR. The basis for each finding is explained in the analysis that follows.

5.2 LAND USE AND PLANNING

EIR 564 provided a complete land use and planning environmental setting. The setting information and analyses from EIR 564 are summarized below and focus on changes to this topic since EIR 564. Additionally, the Great Park EIR, 2011 Supplemental EIR, and 2012 Draft Supplemental EIR; Alton Parkway Extension Project EIR 585 (EIR 585); and the Lake Forest Opportunities Study and Subsequent EIR are included in the analysis with regard to changes in land use and planning impacts related to the JAMF Master Plan. These EIRs are included in the analysis below and are incorporated herein by reference.

5.2.1 Existing Environmental Setting

The project site is located in the unincorporated area (actually an unincorporated island) of the County. As shown in Figure 3-2, the County island is surrounded by land within the Cities of Irvine and Lake Forest. The County Land Use Element has designated the project site for public facility uses, which are defined as areas of "...major facilities built and maintained for public use. Land uses included in the Public Facilities designation are: civic buildings, airports, junior colleges, military institutions, correctional institutions, hospitals, solid waste facilities, water facilities, and sewer facilities." The project site is zoned by the County as A-1, "General Agricultural" District, and the Borrego Wash portion of the site along Alton Parkway is included in the FP-2 "Floodplain" District. Although the construction of Alton Parkway removed the area from the floodplain, the zoning has not been changed. The A-1 District permits agricultural, residential, and a wide variety of conditional uses, which include public facilities.

The lands within the project boundary have been planned for an expanded JAMF since 1986. Pursuant to Section 7-9-20(i) of the Zoning Code, land owned in fee by the County or land leased to the County shall not be subject to the land use regulations of the County, including but not limited to the Zoning Code, Specific Plans, and planned communities. While the project is consistent with the General Plan Land Use designation and allowable under the zoning, the JAMF Master Plan is not subject to the regulations of the Orange County Zoning Code (California Government Code Sections 53090 through 53091, Sunny Slope Water Co. v. City of Pasadena, Cal 2d 87,98 [1934]).

The original project site encompassed approximately 100 ac. However, with the Alton Parkway Extension Project that has been constructed along the northwest border of the project, the site acreage has been reduced to approximately 94 ac to accommodate both the roadway and the realignment of Borrego Wash. The project site is presently developed with a minimum-security detention and corrections facility currently designed to accommodate approximately 1,282 inmates. Inmate housing and detention facilities are located in the northeast corner of the site. The remainder of the site has in the past been used for agricultural purposes associated with inmate detention, but at present is not actively cultivated. Agricultural products (eggs and row crops) previously produced at the site provided food for the jail, juvenile justice, and Orangewood Children's Home systems.

The 1996 Master Site Plan would still be implemented, as described in EIR 564, with the changes noted in Chapter 3.0. All proposed uses on the project site are consistent with the continued use of the site as a jail facility and are consistent with the uses described in EIR 564.

5.2.2 EIR 564

Refer to Section 5.8 of EIR 564 for additional information, including a discussion of the existing environmental setting for land use and relevant planning. At the time, the adjacent MCAS El Toro was scheduled to be closed and replaced by a civilian airport (described in the El Toro Reuse Plan), as noted in Section 5.8 of EIR 564. MCAS El Toro is now known as the Great Park and is no longer planned for airport uses.

None of the buildings in the 1996 Master Site Plan were designed to be more than four stories high (approximately 45 ft above ground). The height limitation for buildings was a result of the restrictions that were associated with the military aircraft operations¹ and were continued because of the previously anticipated development of a civilian airport at the former MCAS El Toro. With the passage of Measure W in 2001, County voters opted for the Great Park, a mixed-use redevelopment of MCAS El Toro, instead of a civilian airport. The development of the Great Park would not need to carry forward any of the land use and noise restrictions associated with the previously planned airport. Consequently, the 45 ft height limitation based on the Airport Environs Land Use Plan (AELUP) and airport uses was no longer necessary.

The 1996 Master Site Plan provided for a 22 ac on-site agricultural buffer on the perimeter of JAMF. In addition, EIR 564 also included approximately 40 ac of off-site agricultural mitigation. As

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Federal Aviation Regulations (FAR) Part 77 – Objects Affecting Navigable Airspace was applicable to structures surrounding the MCAS El Toro flight operations and was the source of the 45 ft building height limitation.

discussed in Chapter 4 of this Supplemental EIR, agricultural uses and mitigation are no longer proposed as part of the proposed expansion of JAMF.

The 1996 Master Site Plan and EIR 564 assumed that Alton Parkway would be constructed along the approved 1991 alignment for the extension of Alton Parkway. To accommodate the roadway, the JAMF provided a 60 ft swath of land north of the approved jail expansion to serve as both a security buffer between the roadway and the jail and to accommodate the right-of-way. The existing fence along the northern side of the JAMF reflects the location of the southeasterly boundary of the buffer area, but it does not reflect the ownership boundary of the jail facilities.

The Alton Parkway alignment was modified, and a revised alignment was approved by the County of Orange in 2007. The new approved alignment moved the alignment for Alton Parkway slightly south of the 1991 alignment in order to minimize impacts to the Borrego Canyon Wash. The 2007 approved Alton Parkway alignment resulted in the removal of approximately 5.6 ac from the JAMF site. Generally, the 2007 alignment shown in EIR 564 reflects the current alignment of the Alton Parkway extension, except for the northern edge of the previously approved jail visitor parking structure and the approved future OCSD support facilities.

As noted in EIR 585, to accommodate the new Alton Parkway alignment, the 1996 Master Site Plan needed to be reconfigured. The reduction in the number of acres of on-site agricultural land in the JAMF Master Plan were originally included in the findings for FEIR 447, which addressed the full loss of agricultural land at JAMF. The reconfiguration would change the internal layout of the approved expansion, but the number of inmates and operational components addressed in EIR 564 would not change.

EIR 564 determined that the project is consistent with the County General Plan and Zoning regulations and would have no impact on County or adjacent city plans, programs, or development regulations. In addition, EIR 564 found that no impacts related to incompatible existing and proposed land uses at MCAS El Toro would occur. EIR 564 also found that since no significant land use impacts would occur, no mitigation measures were necessary. However, mitigation measures were included to reinforce the finding that no significant impacts would occur.

5.2.3 Analysis of Changes in Circumstances and Setting

Changes since EIR 564 include the growth and development around the JAMF site, as summarized in Chapter 3.0 of this Supplemental EIR. These changes include redesignation of General Plan and zoning land uses for properties in the Cities of Lake Forest and Irvine in the vicinity of the JAMF site.

Great Park EIR, 2011 Supplemental EIR, and 2012 Draft Supplemental EIR. As previously discussed in Chapter 3.0, the City of Irvine has authority over the Great Park. The Irvine City Council established the Orange County Great Park Corporation, a nonprofit corporation, to oversee the design, construction, and maintenance of the Orange County Great Park, a 1,347-acre metropolitan park on the site of the former MCAS El Toro. Land uses at the Great Park were established after the approval of the 1996 Master Site Plan. The Great Park EIR discusses the JAMF expansion plans and acknowledges it as a preexisting land use and that 7,584 inmates could be housed in new facilities on the JAMF site. The JAMF site is located in part of the City of Irvine's Planning Area (PA) 35.

However, land use plans for the Great Park do not include PA 35. The 2011 Supplemental EIR analyzed land use impacts of the revised plans in Section 5.6 of that and found: "no significant impacts relating to land use and planning have been identified. All Modified Project impacts related to land use will be less than significant without mitigation." No significant land use impacts (from the JAMF expansion or otherwise) were identified in the Great Park EIR or the 2011 Supplemental EIR. Changes in surrounding land uses by the City of Irvine after the approval of the JAMF Master Plan involving jail expansion do not change the disposition of the existing or planned land uses at JAMF.

Lake Forest Opportunities Study Program EIR and Supplemental EIR. As discussed in Chapter 3.0, the Lake Forest Opportunities Study identified seven parcels that have reclassified land uses. The EIR and Recirculated EIR for the Opportunities Study did not identify any significant adverse land use impacts resulting from proximity to the JAMF. The Supplemental EIR for the Shea/Baker development excluded land use as an issue requiring additional CEQA analysis in Section 2.3.1 of that EIR. Therefore, changes in land uses in the City of Lake Forest do not change the disposition of the existing or planned land uses at JAMF.

Alton Parkway Extension EIR. As previously discussed, the extension of Alton Parkway has always been anticipated in the master site planning for the JAMF and is shown prominently in EIR 564. The Alton Parkway EIR 585 examined potential impacts to the JAMF site as a result of several alternative alignments. The now-constructed roadway traverses the northwest edge of the project very close to the Alton Parkway alignment anticipated in EIR 564. Therefore, the Alton Parkway project does not change to a substantial degree the setting and circumstances of the JAMF or the 1996 Master Plan, except for the need to relocate several proposed facilities that were to be located along the northwestern edge of the JAMF site.

Natural Community Conservation Plan Central/Coastal Reserve. The NCCP Central/Coastal Reserve lies northeast of the project site, with an open space buffer between the JAMF site and the Central Reserve boundary. The JAMF site is developed with facilities and agricultural fields. The JAMF Master Plan would not have an effect on the NCCP Central/Coastal Reserve, as it would not encroach onto any reserve property or native habitat. The majority of jail housing is currently located in the central part of the JAMF site and would not be in close enough proximity to the Central/Coastal Reserve to have an off-site impact.

5.2.4 Mitigation Measures from EIR 564

In light of changes in circumstances and setting, EIR 564 was reviewed to determine whether or not changes to the project setting would affect the mitigation measures contained therein. Based on the analysis and information above, no additions to the land use and planning mitigation measures found in EIR 564 are required. Mitigation measures related to land use and planning from EIR 564 are provided below with an update to their applicability.

EIR 564 found that mitigation measures addressing land use impacts are not necessary. However, mitigation measures were incorporated to reinforce the finding that no significant impacts related to land use and relevant planning would occur. Mitigation Measure Nos. 42 through 44c pertaining to

land use are listed below. Several are no longer applicable due to changes to land use jurisdiction and changes from the planned commercial airport use of MCAS El Toro to the Great Park.

42. In connection with the adoption of zoning regulations for the Reuse Plan area, the County of Orange shall prohibit bail bondsmen and sexually oriented businesses from the "Open Space/Institutional" and "Education/Institutional" areas adjacent to the jail as shown on Figure 5-2 of the Reuse Plan EIR.

Mitigation Measure No. 42 would still apply because a small area around JAMF is owned by the County.

42a. To the extent permitted by California and constitutional law, medium and maximum security inmates shall make their court appearances from the facility using video appearances.

The JAMF Master Plan has this technology in its plans, and as it can be accommodated by the court system, this method shall be used as much as feasible and with the cooperation of the courts.

43. If the City of Irvine or the City of Lake Forest finds that there is a potential for undesirable uses to establish in their cities as a result of the jail expansion, these cities can and should zone their territory to prohibit such uses.

Note: Pursuant to CEQA Guidelines $\S15091(a)(2)$, this measure is within the responsibility and jurisdiction of another public agency, and not the County of Orange.

As noted, Mitigation Measure No. 43 is not under the control of the County of Orange.

43a. Prior to the commencement of construction of any building shown for the site, the County of Orange shall record a buffer area which prevents construction of any non-agriculturally related buildings, and preserves this area as a buffer. ¹

As discussed in Chapter 4.0 of this Supplemental EIR, Mitigation Measure No. 43a is no longer proposed.

44. Prior to the commencement of grading for the project, the County of Orange shall give notice of proposed construction to the Federal Aviation Administration (FAA) pursuant to FAR Part 77. At that time, notice shall be given to any other agency which may have jurisdiction or review authority at that future time.

Mitigation Measure No. 44 is no longer applicable with the cessation of an airport use at the former MCAS El Toro Air Station property.

44a. The County of Orange shall insure that "walk-aways" from the Interim Care Facility, if established at this site, are promptly returned.

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It should be noted that Mitigation Measure 43a was added to the mitigation measures for land use, but does not correspond to a potential significant effect to land use. It was incorporated at the suggestion of the City of Lake Forest's comments on DEIR 564, Comment and Response No. 125 of FEIR 564.

Mitigation Measure No. 44a is still applicable and will apply in the event the ICF is built at JAMF.

44b. Prior to the occupation of the first new jail building at the Musick Jail, the County shall open to operation the Sheriff's Southeast Station at the site.

Mitigation Measure No. 44b is no longer applicable. The JAMF Master Plan does not include the Southeast Sheriff's Station in Phase I. The JAMF site is one of several candidate locations for the Southeast Sheriff's Station. The final location of the Southeast Sheriff's Station has not been determined and could be located farther south than the JAMF site. If that is ultimately the case, the Southeast Sheriff's Station would no longer be an element of the JAMF Master Plan. The Southeast Sheriff's Station, if built at the JAMF, will be built in a later phase of development of the JAMF Master Plan.

44c. Prior to the occupancy of the first jail building, the "First Defense" fence or equivalent shall be constructed to the extent necessary for that phase of project implementation.

Mitigation Measure No. 44c is applicable and has been met through what would be considered the equivalent of a first defense fence in the secure building perimeter in the proposed design. Fencing plans discussed in Section 3.3 and shown in Figures 3-14 and 3-15 will serve as security fencing around the site. As shown in these figures, each building has a secure perimeter and the security fence serves as the secondary defense. The security programmed for JAMF, including the security fencing, is based on proven modern design aimed at minimizing escape and security risks.

The deletion of mitigation measures 43 is the only change to the proposed land use and planning mitigation measures. The impact is analyzed in Chapter 4.0 with regard to the loss of agricultural resources.

5.2.5 Findings Related to Land Use and Planning

No New Significant Effects Requiring Major EIR Revisions. Based on the foregoing analysis and information, there is no evidence that changes in circumstances or setting constitute a major change to EIR 564. Changes in circumstances and setting will not result in new significant environmental impacts to land use and planning, nor is there a substantial increase in the severity of impacts described in EIR 564.

No Substantial Change in Circumstances Requiring Major EIR Revisions. There is no information in the record or otherwise available that indicates that there are substantial changes in circumstances pertaining to land use and planning that would require major changes to EIR 564.

No New Information Showing Greater Significant Effects than EIR 564. This environmental analysis has analyzed all available relevant information to determine whether there is new information that was not available at the time of preparation of EIR 564, in 1996, that would indicate that a new significant effect that was not originally analyzed in that document could occur. Based on

the information and analyses above, there is no substantial new information indicating that there will be a new significant impact to land use and planning requiring major revisions to EIR 564.

No New Information Showing Ability to Reduce Significant Effects in Previous EIR. There are no alternatives to the project or additional mitigation measures that would substantially reduce one or more significant impacts pertaining to land use and planning identified in and considered by EIR 564. No significant impacts were identified EIR 564 or in this Supplemental EIR, so new information would not further reduce impacts to land use planning. As previously discussed in Chapter 2.0, efforts were made to locate an alternative site in the County for a new jail. Those efforts were unsuccessful.

5.3 POPULATION AND HOUSING

5.3.1 Existing Environmental Setting

One of the main changes in the setting around the existing JAMF is the change in planned land uses in the Cities of Irvine and Lake Forest. After the adoption of the Great Park, the area surrounding JAMF in the City of Irvine was designated Research and Industrial, and Open Space in the City of Irvine General Plan. The designation of Retail, Business Park, Open Space, and Low-Density Residential in the City of Lake Forest General Plan remains unchanged, as most of it (with the exception of the Shea-Baker property) was previously developed. The existing surrounding land uses have not changed since EIR 564, and neither have the existing population and housing around the project site.

5.3.2 EIR 564

In accordance with Section 15128 of the State CEQA Guidelines, EIR 564 determined that the potential project effects related to population and housing would not be significant during preparation of the IS Checklist/Notice of Preparation (NOP) and does not address them further. The IS prepared for the NOP for EIR 564 states that the project would not result in an impact related to population and housing because the "population" of the jail facility is the result of an increase in population, not the catalyst for an increase, and because the Orange County Sheriff's Department hires approximately 63 percent of its staff from existing Orange County residents. Because the property is already owned by the County and houses an operating jail, no residential displacements would occur. The existing jail has not been shown to physically divide the community, and in fact, the site straddles the boundaries of the Cities of Irvine and Lake Forest. Further, the project would provide additional housing for inmates. Any jail housing that would be displaced due to the project would be rebuilt on the project site, and inmates would be rehoused in new facilities. Hence, the EIR 564 concluded that significant impacts related to population and housing would not occur.

5.3.3 Analysis of Changes in Circumstances and Setting

The only substantive changes related to the setting for population and housing relate to the Great Park. As for JAMF, there have not been substantive changes in circumstance or setting related to population and housing since EIR 564 was certified, including the number of inmates on site. The JAMF Master Plan would provide for the same size and type of jail facility expansion that was

evaluated in EIR 564. As in 1996, the JAMF Master Plan project is not anticipated to influence existing or long-term growth in the area, nor would it change any constraints to development of nearby areas, as these areas are already developed, planned for development, or reserved open space/habitat areas. The proposed project would not result in the displacement of housing or people, as development would occur on the existing jail site and inmates would not be displaced during construction. Therefore, in consideration of the above, the changes in circumstances and setting do not require any major changes to EIR 564 and would not result in any new significant environmental impacts.

Great Park EIR, 2011 Supplemental EIR, and 2012 Draft Supplemental EIR. The Orange County Great Park Program EIR concluded that the project-related employment growth would exacerbate the subregional jobs/housing imbalance (there are more jobs in Orange County than available/affordable housing for the workforce), which was considered significant and unavoidable. The 2011 Supplemental EIR concludes in Section 5.8.8: "There is no incremental increase in jobshousing ratio with the Modified Project as compared to the Approved Project. However, since a jobshousing imbalance remains under the Modified Project, the overall impact of the Modified Project remains significant and unavoidable." This conclusion does not have an effect on the original analysis in the NOP for EIR 564, which did not identify potential population and housing impacts associated with implementation of the 1996 Master Site Plan.

The Great Park plans show development of the former military base to west of the JAMF site (refer to Figures 3-6, 3-6A and 3.6B in Chapter 3). However, zoning for the undeveloped area to the north is shown as either agriculture (1.1) or preservation (1.4) associated with the NCCP. These uses did not change with the rezoning and general plan designation amendments associated with the revisions to the Great Park development analyzed in the Great Park 2011 Supplemental EIR or the 2012 Draft Supplemental EIR.

Lake Forest Opportunities Study Program EIR and Supplemental EIR. The Lake Forest Opportunities Study Recirculated EIR points out that the conversion of many employment uses to residential uses helps the jobs/housing balance. However, the project would induce substantial population growth. This was identified as a cumulative significant unavoidable adverse impact of the project. The additional population growth associated with the changes in land uses in the City of Lake Forest does not have an effect on the original analysis in the NOP for EIR 564, which did not identify potential population and housing impacts associated with implementation of the 1996 Master Site Plan.

Alton Parkway Extension EIR. Population and housing was screened out as a potential impact category during the NOP stage of the Alton Parkway Extension Project and was not analyzed in EIR 585.

5.3.4 Mitigation Measures from EIR 564

In light of changes in circumstances and setting, EIR 564 was reviewed to determine whether or not changes to the project setting would affect the mitigation measures contained therein. Based on the

analysis and information above, mitigation measures related to population and housing were not required in EIR 564. Also, no new impacts to population and housing have been identified, so mitigation measures related to population and housing are not required for implementation of the proposed JAMF Master Plan.

5.3.5 Findings Related to Population and Housing

No New Significant Effects Requiring Major EIR Revisions. Based on the foregoing analysis and information, there is no evidence that changes in circumstances or setting necessitate a major change to EIR 564. Changes in circumstances and setting will not result in new significant environmental impacts to population and housing, nor is there a substantial increase in the severity of impacts described in EIR 564.

No Substantial Change in Circumstances Requiring Major EIR Revisions. There is no information in the record or otherwise available that indicates that there are substantial changes in circumstances pertaining to population and housing that would require major changes to EIR 564.

No New Information Showing Greater Significant Effects than EIR 564. This environmental analysis has analyzed all available relevant information to determine whether there is new information that was not available at the time EIR 564 was certified, indicating that a new significant effect not reported in that document may occur. Based on the information and analyses above, there is no substantial new information indicating that there will be a new significant impact to population and housing requiring major revisions to EIR 564.

No New Information Showing Ability to Reduce Significant Effects in Previous EIR. There are no alternatives to the project or additional mitigation measures that would substantially reduce one or more significant impacts pertaining to population and housing identified in and considered in EIR 564 since no population and housing impacts were identified in EIR 564.

5.4 GEOPHYSICAL

FEIR 447 for the Musick Facility Master Plan (1986) provided a complete geophysical environmental setting, which was incorporated by reference in EIR 564. The following setting information and analyses from EIRs 447 and 564 are summarized below and are incorporated herein by reference. Additionally, the Alton Parkway Extension Project EIR 585 is also helpful in analyzing potential geophysical impacts related to the proposed JAMF Master Plan, is included in the summarization and analysis below, and is herein incorporated by reference.

5.4.1 Existing Environmental Setting

As with all of Southern California, the project site is subject to strong ground motion resulting from earthquakes on nearby faults, including the Newport-Inglewood Fault Zone, Chino-Central Avenue Fault, and Whittier-Elsinore Fault, which are the closest active faults to the project site. There are,

however, no known active or potentially active faults or fault traces crossing the site. Therefore, the project site is not located within a currently designated Alquist-Priolo Earthquake Fault Zone (known as Special Studies Zones prior to January 1, 1994).

As described in both EIR 564 and EIR 447, the JAMF site is marked by a localized highland in the northeastern portion of the site. The difference in elevation across the property from south to north is approximately 82 ft. Borrego Wash lies to the west/northwest of the project site. Groundwater was not encountered to a depth of 45 ft below the ground surface. However, well data in the area indicates groundwater levels at some 30 ft below the surface. The types of soils that underlie the project site are mainly alluvial and terrace deposits with some clay content. The potential for liquefaction in the project site is considered to be low due to the groundwater level. In addition, there are no slopes, landslides, or areas known to contain unsuitable soils on the project site.

5.4.2 EIR 564

EIR 564 determined that no significant impacts related to geology would result from expansion of the jail facility.

All applicable guidelines, including compliance with the California Building Standards Code (CBSC, formerly called the Uniform Building Code), accepted industry standards, and other regional and local regulations that address seismic hazards, are incorporated into the project design and would reduce potentially significant seismic-related hazards to less than significant levels. EIR 564 concluded that compliance with standard State and local building requirements and specific mitigation measures would reduce potential impacts related to geophysical topics to levels considered less than significant. Mitigation measures included in EIR 564 are provided below.

5.4.3 Analysis of Changes in Circumstances and Setting

There have not been substantive changes in circumstance or setting related to potential geophysical risks since EIR 564 was certified. The jail expansion project would provide for the same size and type of jail facility expansion that was evaluated in EIR 564. There are no changes to the proposed project that would affect geology and soils. As concluded in EIR 447 and EIR 564, improvements to JAMF are not anticipated to result in significant impacts related to geophysical topics.

As with all of Southern California, the project site is subject to strong ground motion resulting from earthquakes on nearby faults. The two closest major active faults are the Whittier-Elsinore Fault, located approximately 14 miles (mi) northeast of the site, and the Newport-Inglewood Fault, located approximately 10 mi southwest of the site. Both faults trend diagonally northwest to southeast. EIR 564 concluded that compliance with standard State and local building and infrastructure design requirements and Mitigation Measure No. 1, which required the preparation of a geotechnical report, would reduce potential impacts related to geology and seismicity to levels considered less than significant. Mitigation Measure No. 1, included in EIR 564, is listed below.

Similarly, any soil stability concerns can be overcome by adherence to applicable design guidelines and compliance with the CBSC, accepted industry standards, and other regional and local regulations. As the project is being constructed according to County development standards, and there are no

unique conditions on the site, the proposed project would not pose any new substantial risk not already addressed in EIR 564.

Therefore, in consideration of the above, the changes in circumstances and setting do not require any major changes to EIR 564 and would not result in any new significant environmental impacts.

Great Park EIR, 2011 Supplemental EIR, and 2012 Draft Supplemental EIR. Nothing in the Orange County Great Park Program EIR or the 2011 Supplemental EIR indicates additional or elevated geophysical or seismic hazards in the study area or the vicinity. There are a variety of soil types in the area that would need to be analyzed in a site-specific geology and soils report for each potential development site. Unstable or problematic soil types would be required to be remediated by the applicable building codes in the event a foundation was to be built on problematic soil.

Lake Forest Opportunities Study Program EIR and Supplemental EIR. As in the Orange County Great Park Program EIR, the Lake Forest Opportunities Study Program EIR and Supplemental EIR indicates no additional or elevated geophysical or seismic hazards on the project site or in the vicinity. There are a variety of soil types in the area that would need to be analyzed in a site-specific geology and soils report for each potential development site. Unstable or problematic soil types would be required to be remediated by the applicable building codes in the event a foundation was to be built on problematic soil.

Alton Parkway Extension EIR. According to EIR 585, Exhibit 3.2-1 indicates that the northern part of the JAMF site is part of a liquefaction zone associated with the soil type inherent in the Borrego Wash. However, the building layout of the JAMF Master Plan avoids the liquefaction area indicated on Exhibit 3.2-1 of EIR 585. Therefore, the liquefaction risk potential for the JAMF Master Plan would not change from that originally analyzed in EIR 564.

5.4.4 Mitigation Measure from EIR 564

EIR 564 was reviewed to determine whether or not changes to the project setting would affect the mitigation measures contained therein. Based on the analysis and information above, no changes to the mitigation measure related to geophysical risks found in EIR 564 are required. The mitigation measure related to geophysical risks that would be applicable to the proposed JAMF Master Plan is provided below. It should be noted that Mitigation Measure No. 1 does not address a potential significant effect, but it is included to notify the reader that as part of the final design, a design-specific geotechnical report will be prepared and the recommendations from that report will be incorporated into the final building design program for the JAMF Master Plan.

1. Prior to the issuance of construction bid documents for any permanent construction at the Musick Jail, the County shall cause to be prepared a final geotechnical report. This report shall be approved by the County's Planning and Development Services entity. Recommendations of the engineering geologist and soils engineer shall be incorporated into the project plans and specifications for the construction of the facility.

5.4.5 Findings Related to Geophysical Risks

No New Significant Effects Requiring Major EIR Revisions. Based on the foregoing analysis and information, there is no evidence that changes in circumstances or setting necessitate a major change to EIR 564. Changes in circumstances and setting will not result in new significant environmental impacts to geophysical risks, nor is there a substantial increase in the severity of impacts described in EIR 564.

No Substantial Change in Circumstances Requiring Major EIR Revisions. There is no information in the record or otherwise available that indicates that there are substantial changes in circumstances pertaining to geophysical risks that would require major changes to EIR 564.

No New Information Showing Greater Significant Effects than EIR 564. This environmental analysis has analyzed all available relevant information to determine whether there is new information that was not available at the time EIR 564 was certified, indicating that a new significant effect not reported in that document may occur. Based on the information and analyses above, there is no substantial new information indicating that there will be a new significant impact to geophysical risks requiring major revisions to EIR 564.

No New Information Showing Ability to Reduce Significant Effects in Previous EIR. There are no alternatives to the project or additional mitigation measures that would substantially reduce one or more significant impacts pertaining to geophysical risks analyzed in EIR 564.

5.5 HYDROLOGY AND WATER QUALITY

5.5.1 Existing Environmental Setting

The project site is located in the Borrego Canyon subregional watershed in the San Diego Creek Watershed. The San Diego Creek Watershed drains approximately 80 percent of the 154 square miles that are tributary to Upper Newport Bay. The topographic characteristics of the watershed are diverse and include rolling and rugged foothills in the east, alluvial plains in the central portion, coastal plains in the western portion, and moderately steep hills to the south. The JAMF site, while generally flat, has an elevation gradient running northeast to south. As part of the Alton Parkway Project, the Borrego Wash was realigned to run on the surface and underground on the northwestern side of Alton Parkway.

Regulatory Background. The project is required to comply with the State General Construction Activity Storm Water Permit (2009-0009-DWQ, adopted September 2, 2009) National Pollutant Discharge Elimination System (NPDES) Permit during construction as well as the requirements of the Orange County NPDES Order No. R8-2009-0030 (NPDES No. CAS 618030) as amended by Order No. R8-2010-0062, which regulates storm water discharge during operation of the site. This permit requires that the project applicant submit a Notice of Intent to the State Water Resources Control

Board at least 30 days prior to the start of construction, prepare a Storm Water Pollution Prevention Plan (SWPPP) before grading can begin, and submit a Notice of Termination to the Orange County Regional Water Quality Control Board (RWQCB) on completion of construction and stabilization of the site. The project is also subject to the requirements of the County of Orange Drainage Area Management Plan (DAMP), which enforces the requirements of the NPDES permits.

A SWPPP would be prepared for the project. The SWPPP would identify construction best management practices (BMPs) to be implemented as part of the proposed project to reduce impacts to water quality during construction. A Water Quality Management Plan (WQMP) is currently being prepared for the project, as required by mitigation included in EIR 564. The WQMP details Source Control, Site Design, and Treatment Control BMPs that would be implemented to reduce impacts to water quality from operation of the proposed project. Runoff from the project site would be treated prior to discharging into a storm drain system and Borrego Canyon Wash, which ultimately discharges into San Diego Creek. One of the primary BMPs is the new detention basin located in the southern corner of the JAMF site. This detention basin treats runoff from both Alton Parkway and the JAMF site.

One of the requirements for WQMPs, pursuant to the County's DAMP, is that all priority new development and significant redevelopment projects are required to develop and implement a WQMP that addresses the following:

- Consideration of Site Design BMPs (as appropriate)
- Structural and nonstructural Site Design BMPs (as appropriate)
- Treatment Control BMPs (site-specific or regional, if applicable)
- The mechanism(s) by which long-term operation and maintenance of all structural BMPs will be provided, as described in DAMP Section 7.6.6

Collectively, the proposed project's Site Design, Source Control, and Treatment Control BMPs are required to address the pollutants of concern identified for the project (typical urban pollutants such as oil, grease, fertilizers, and pesticides). Typical treatment BMPs and WQMP process are included in Appendix G of this Supplement to EIR 564.

5.5.2 EIR 564

Section 5.3 of EIR 564 includes a summary of the existing environmental setting for water resources. EIR 564 analyzed the conversion of land from agricultural uses to urban uses. The analysis in the EIR concluded that the 1996 Master Site Plan would result in a net decrease of certain discharges, including nutrients associated with agricultural uses, into surface waters. The EIR also found that the 1996 Master Site Plan would result in an increase in urban-related pollutants in surface water runoff compared to existing conditions. Typical urban contaminants include inorganic sediment, organic material, algae nutrients, heavy metals, and pesticides. These materials accumulate in streets and parking lots and are carried by irrigation runoff and rainwater to receiving waters (San Diego

The 1996 EIR identifies this document as a Water Quality Control Plan; the description and intent of the document is the same as a WQMP.

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Creek) and ultimately to Upper Newport Bay. The concentration and composition of these pollutants are known to vary widely, depending on the precise land uses involved.

One mitigation measure included in EIR 564 requires the development of a WQMP to identify the site hydrology and its position in the San Diego Creek drainage area, flow paths, impervious areas, the appropriate nonstructural and structural BMPs, maintenance responsibilities, ownership of BMPs, selection criteria, and methods of determining the effectiveness of BMPs. The purpose of the WQMP is to reduce nuisance flows and minimize pollutants in storm water runoff. The WQMP is required to be developed during the final design process. BMP measures to be considered in the WQMP included structural and nonstructural BMPs. EIR 564 found that after implementation of all mitigation, the project's impacts on water quality would be less than significant.

5.5.3 Analysis of Changes in Circumstances and Setting

EIR 564 stated that approximately 20 ac of the 100+ ac of the JAMF site is covered with impervious surfaces. Therefore, a large portion of the site is already subject to erosion control measures through detention basins and existing terraces on site. During grading of the project site, there would be an increased potential for soil erosion compared to existing conditions. Additionally, during a storm event, soil erosion could occur at an accelerated rate. The increased erosion potential could result in short-term water quality impacts. These water-related impacts would be reduced to a level considered less than significant through implementation of the mitigation measures described in EIR 564, which require preparation of a SWPPP to identify construction BMPs that would reduce water quality impacts during construction.

One of the changes in the design in the Master Site Plan moves away from the originally planned multistory parking structures in favor surface parking lots. This change in the design results in less visual intrusion of the on-site structures, but increases the amount of impervious surfaces. Because the project qualifies as a Priority project under the DAMP, incorporation of pervious surfaces in the design (e.g., landscaping, pervious pavement) would be required as site design BMPS. Site design provisions and drainage system improvements associated with development of the JAMF Master Plan would include water quality control measures, including BMPs. Two detention basins are planned.

Alterations to drainage patterns, surface waters, floodwaters, or groundwater levels are still expected to occur as a result of project implementation, as stated in EIR 564. The main water course in the area is Borrego Wash, which was changed as part of the Alton Parkway Extension Project, not the JAMF Master Plan. As stated above, additional mitigation in EIR 564 requires the development and implementation of structural and nonstructural BMPs to reduce nuisance flows and minimize pollutants in storm water runoff. With implementation of all mitigation and compliance with the County's DAMP and NPDES permits, potential project impacts would be reduced to less than significant levels.

The circumstances related to hydrology have changed from the analysis in EIR 564, which anticipated construction of the Alton Parkway Extension, but not substantially enough to change the conclusion of EIR 564. In addition, the proposed mitigation measure addressing water quality is still applicable.

Great Park EIR, 2011 Supplemental EIR, and 2012 Draft Supplemental EIR. The Great Park EIR concluded that potential hydrology and water quality impacts, both individual and cumulative, would not be significant due to the requirements of the Flood Control Master Plan for San Diego Creek and the requirements of the DAMP. The EIR stated that the improvements to Alton Parkway would assist in alleviating any flooding problems on site. The topic was not included in the 2011 Supplemental EIR. The analysis in the Great Park EIR and 2011 Supplemental EIR do not change the circumstances related to hydrology and water quality for the JAMF site, as analyzed in EIR 564.

Lake Forest Opportunities Study Program EIR and Supplemental EIR. The Lake Forest Opportunities Study Program EIR analysis of hydrology and water quality finds less than significant impacts with the application of the suggested mitigation measures discussed in Section 3.8 of the EIR. However, it notes that the land use changes brought about by the Opportunities Study project may have a cumulative impact on water quality in the area of pesticide contribution since the watershed is already significantly affected by pesticides. This conclusion is based on the anticipation that water quality limits (total maximum daily loads, or TMDLs) for Upper Newport Bay/San Diego Creek, the receiving water for the Borrego Canyon Wash, will still be exceeded regardless of whether the changes in land uses would reduce pesticide contribution in the watershed. Unlike the land use changes studied in the Opportunities Study, the proposed JAMF Master Plan does not involve a sweeping change in land use entitlements; rather, it only updates the previous approved 1996 Master Site Plan. Therefore, many of the cumulatively considerable impacts associated with land development would not be associated with the development of a public facility such as a jail. The future water quality impacts associated with the JAMF Master Plan would be linked to the future development of the jail buildings and other facilities on site. While not absolute, this is a tangible and predictable level of development at build out without a large range of outcomes or secondary impacts. In addition, the JAMF Master Plan is designed through build out, so the uncertainties related to development noted in the Lake Forest Program EIR are generally known in the JAMF Master Plan. Hydrology and Water Quality were not included in the Supplemental EIR.

Alton Parkway Extension EIR. One of the prominent components of the Alton Parkway Extension Project is the stabilization of Borrego Canyon Wash along the northwest boundary of the JAMF site. With the Alton Parkway Extension in place, the potential impacts of the JAMF Master Plan to the hydrology and water quality of Borrego Canyon Wash are mitigated by design of Alton Parkway. Borrego Canyon Wash is separated from the JAMF site by Alton Parkway and the new underground channel extension. New detention basins were incorporated into Alton Parkway right-of-way to collect and treat runoff associated with the roadway. The Alton Parkway Extension was anticipated as part of the 1996 Master Site Plan, and its implementation does not change the disposition or potential for significant impacts to hydrology and water quality from the JAMF Master Plan.

5.5.4 Mitigation Measure from EIR 564

In light of changes in circumstances and setting, EIR 564 was reviewed to determine whether or not changes to the project setting would affect the mitigation measures contained therein. Based on the analysis and information above, no changes to the mitigation measure found in EIR 564 are required.

30. Prior to commencement of grading, applicant shall submit for approval of the Manager, Development Services, a Water Quality Management Plan (WQMP) specifically identifying Best Management Practices (BMPs) that will be used onsite to control predictable pollutant runoff.

This WQMP shall identify the structural and non-structural measures specified in the Countywide NPDES Drainage Area Management Plan Appendix which details implementation of BMPs whenever they are applicable to a project, the assignment of long-term maintenance responsibilities, and shall reference the location(s) of structural BMPs. The SWPPP shall be prepared for construction activities and shall be consistent with Regional Water Quality Control Board NPDES Permit No. CAS618030, and the State General Construction Activity Storm Water Permit (2009-0009-DWQ).

5.5.5 Findings Related to Water Resources

No New Significant Effects Requiring Major EIR Revisions. Based on the foregoing analysis and information, there is no evidence that changes in circumstances or setting necessitate a major change to EIR 564. Changes in circumstances and setting will not result in new significant environmental impacts to hydrology and water quality. While there is an increase in impacts analyzed in EIR 564, the increase is not considered substantial with regard to severity of impacts and would not change the mitigation described in EIR 564.

No Substantial Change in Circumstances Requiring Major EIR Revisions. While there is a change to the hydrology due to the revision of the Master Site Plan, the changes are not substantial enough to warrant major changes to the EIR. No information in the record or otherwise is available that indicates that there are substantial changes in circumstances pertaining to hydrology and water quality that would require major changes to EIR 564.

No New Information Showing Greater Significant Effects than EIR 564. This environmental analysis has analyzed all available relevant information to determine whether there is new information that was not available at the time EIR 564 was certified, indicating that a new significant effect not reported in that document may occur. Based on the information and analyses above, there is no substantial new information indicating that there will be a new significant impact to hydrology and water quality requiring major revisions to EIR 564.

No New Information Showing Ability to Reduce Significant Effects in Previous EIR. There are no alternatives to the project or additional mitigation measures that would substantially reduce one or more significant impacts pertaining to hydrology and water quality identified in and considered in EIR 564.

5.6 TRANSPORTATION/CIRCULATION

The format for this section differs from the other sections in this chapter because new analysis is being incorporated. In order to analyze the impact of the Revised JAMF Master Plan on traffic, an updated traffic analysis was completed. This traffic analysis is the basis for the updated discussion in this section. The traffic analysis is included as Appendix D of this Supplemental EIR.

At the time of the 1996 Master Plan approval, the MCAS El Toro site was planned to be an international airport. The previous MCAS El Toro is now the Great Park, a planned community with residential, commercial, business, and regional park uses in Irvine. For the purposes of this supplemental traffic analysis, data from approved EIR 564, the Alton Parkway Extension EIR 585, and the Lake Forest Vacant Land Opportunities Study have been included in order to reflect updated existing and future traffic conditions (the existing and General Plan build-out data are provided in Attachments A and B of Appendix D). Existing 2004 conditions were referenced from the recently approved Alton Parkway Extension EIR 585, which more accurately reflects current roadway conditions than the 1996 EIR 564, the original analysis of the JAMF expansion. Additional existing data for intersections not included in EIR 585 were obtained from EIR 564.

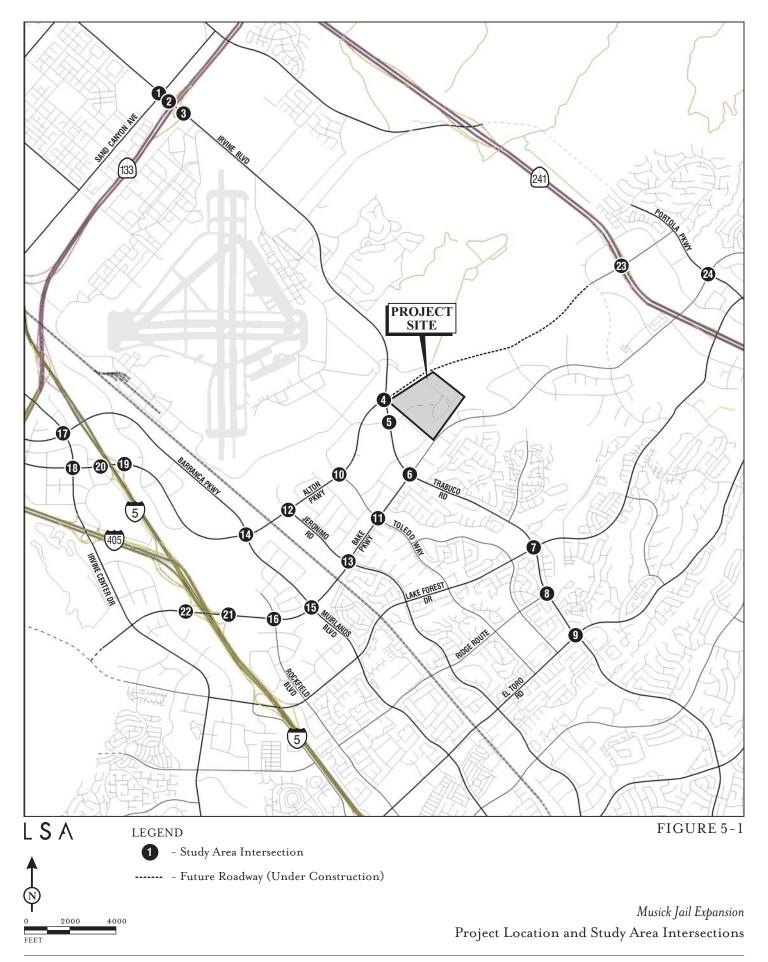
It should be noted that the Alton Parkway Extension EIR included a "special analysis" of General Plan build-out conditions with and without the JAMF expansion, which has been referenced for this supplemental analysis. Additional General Plan build-out data was obtained from the Vacant Land Opportunities Study, which did not include an evaluation of the JAMF. The Alton Parkway Extension EIR and the Vacant Land Opportunities Study are the two most recent documents that analyze the currently proposed land uses of the areas surrounding the JAMF site. Therefore, these documents have been used to evaluate proposed development and land use changes that have occurred since 1996.

5.6.1 Existing Environmental Setting

Study Area Boundary. As illustrated in Figure 5-1, the study area includes 24 intersections within the area bounded by Sand Canyon Avenue and Irvine Center Drive to the west, Portola Parkway to the north, Bake Parkway to the south, and El Toro Road to the east. The limits of the study area are based on the potential impact of the existing and future roadway network and the existing conditions surrounding the project site.

For purposes of this supplemental traffic analysis, the study area is based on the original study area of the JAMF expansion in the 1996 EIR 564. Based on discussions with County of Orange Public Works staff, the study area includes two additional intersections (Alton Parkway/State Route 241 [SR-241] and Bake Parkway/Portola Parkway). This study area is consistent with the study area included in EIR 564.

Performance Criteria. To determine the peak-hour intersection operations at signalized intersections within the study area, the intersection capacity utilization (ICU) methodology was used. The ICU methodology compares the volume-to-capacity (v/c) ratios of conflicting turn movements at an intersection, sums these critical conflicting v/c ratios for each intersection approach, and determines the overall ICU. The resulting ICU is expressed in terms of level of service (LOS), where



LOS A represents free-flow activity and LOS F represents overcapacity operation. Parameters set by the Cities for ICU calculations, including lane capacity, right-turn treatment, and clearance interval, are included in the analysis. The relationship of ICU to LOS is demonstrated in Table 5.A.

Table 5.A: Level of Service Criteria

Level of Service	ICU	Level of Service	ICU
A	0.00-0.60	D	0.81-0.90
В	0.61-0.70	Е	0.91-1.00
С	0.71-0.80	F	> 1.00

ICU = intersection capacity utilization

According to City of Irvine and Lake Forest performance standards, LOS at an intersection is considered to be unsatisfactory when the ICU exceeds 0.90 (LOS D). The exceptions to these standards (i.e., unsatisfactory when the ICU exceeds 1.00 [LOS E]) are the following intersections:

- Alton Parkway/Irvine Boulevard
- El Toro Road/Trabuco Road
- Barranca Parkway/Irvine Center Drive
- Irvine Center Drive/Alton Parkway
- I-5 northbound ramps/Alton Parkway
- Enterprise Drive/Alton Parkway
- I-5 northbound ramps/Bake Parkway
- I-5 southbound ramps/Bake Parkway

A project impact occurs in the study area when the intersection in question exceeds the acceptable LOS (as described above) and the impact of the development is greater than 0.01. Project mitigation will be required to return the intersection to acceptable LOS or baseline (i.e., no project) conditions. This is consistent with the criteria used in EIR 564, EIR 585, and in the Cities of Irvine and Lake Forest.

In order to provide a summary of existing intersection LOS, data has been referenced from the Alton Parkway Extension Project Traffic Analysis (March 2006) and the 1996 EIR 564 (the existing data is provided in Appendix C, Attachment A). A total of 22 study area intersections were evaluated based on the 2004 counts in the Alton Parkway Extension Project Traffic Analysis. The remaining two intersections (Ridge Route Drive/Trabuco Road and El Toro Road/Trabuco Road) were evaluated according to the 1996 counts provided in EIR 564 because they were not included in the Alton Parkway Extension Project Traffic Analysis. The LOS referenced from these documents both include the 1,256 beds that exist on the JAMF site. As Table 5.B indicates, all study area intersections operate at satisfactory LOS according to City of Irvine and Lake Forest standards, with the exception of Bake Parkway/Trabuco Road (i.e., LOS E during the a.m. peak hour). The LOS calculations were based on the existing 2004 roadway network.

Table 5.B: Existing LOS Summary (2004)

		Baseline					
		AM Pe	ak Hour	PM Peak Hour			
	Intersection	ICU	LOS	ICU	LOS		
1	Sand Canyon Ave/Irvine Blvd	0.52	A	0.45	A		
2	SR-133 SB Ramps/Irvine Blvd	0.48	A	0.31	A		
3	SR-133 NB Ramps/Irvine Blvd	0.34	A	0.37	A		
4	Alton Pkwy/Irvine Blvd	0.37	A	0.40	A		
5	Fairbanks-Musick/Irvine Blvd	0.61	В	0.70	В		
6	Bake Pkwy/Trabuco Rd	0.95	Е	0.81	D		
7	Lake Forest Dr/Trabuco Rd	0.74	C	0.74	C		
8	Ridge Route Dr/Trabuco Rd ¹	0.42	A	0.66	В		
9	El Toro Rd/Trabuco Rd ^{1,2}	0.61	В	0.74	C		
10	Alton Pkwy/Toledo Way	0.43	A	0.38	A		
11	Bake Pkwy/Toledo Way	0.85	D	0.62	В		
12	Alton Pkwy/Jeronimo Rd	0.42	A	0.36	A		
13	Bake Pkwy/Jeronimo Rd	0.90	D	0.75	C		
14	Alton Pkwy/Muirlands Blvd	0.50	A	0.45	A		
15	Bake Pkwy/Muirlands Blvd	0.60	A	0.62	В		
16	Bake Pkwy/Rockfield Blvd	0.51	A	0.67	В		
17	Barranca Pkwy/Irvine Center Dr	0.62	В	0.50	A		
18	Irvine Center Dr/Alton Pkwy ³	0.66	В	0.63	В		
19	I-5 NB Ramps/Alton Pkwy ³	0.66	В	0.31	A		
20	Enterprise Dr/Alton Pkwy	0.67	В	0.70	В		
21	I-5 NB Ramps/Bake Pkwy ⁴	0.71	С	0.56	A		
22	I-5 SB Ramps/Bake Pkwy	0.63	В	0.71	C		
23	Alton Pkwy/SR-241 Ramps	0.20	A	0.26	A		
24	Bake Pkwy/Portola Pkwy	0.58	A	0.74	C		

⁼ exceeds City of Lake Forest's and/or City of Irvine's LOS criteria

LOS D (0.81-0.90 ICU) is acceptable at all other locations.

I-5 = Interstate 5

ICU = intersection capacity utilization

LOS = level of service

NB = northbound

SB = southbound

SR-133 = State Route 133

SR-241 = State Route 241

¹ Existing ICU obtained from the Musick Jail Expansion Traffic Analysis (AFA, August 1996). All other existing ICU obtained from the Alton Parkway Extension Project Traffic Analysis (AFA, March 2006)

² LOS E (0.91-1.00 ICU) is acceptable at this location (Congestion Management Program).

 $^{^3}$ LOS E (0.91-1.00 ICU) is acceptable at this location (Irvine Planning Area 33 [Spectrum 1]).

LOS E (0.91-1.00 ICU) is acceptable at this location (Lake Forest General Plan).

5.6.2 Future Conditions

Future Analysis Methodology/Approach. The General Plan build-out traffic forecasts were prepared by Austin-Foust Associates, Inc. (AFA) for the Alton Parkway Extension Project Traffic Analysis (March 2006) and the Lake Forest Vacant Land Opportunities Phase III Study (July 2005). The traffic forecasts within the study area were developed using the Irvine Transportation Analysis Model (ITAM) and the Lake Forest Traffic Analysis Model (LFTAM), which are both derived from the Orange County Transportation Analysis Model (OCTAM) maintained by the Orange County Transportation Authority (OCTA). Both versions of ITAM and LFTAM include the land uses approved as part of the Vacant Land Opportunities Study. The roadway circulation improvements identified in the North Irvine Transportation Mitigation (NITM) Program and Lake Forest Transportation Mitigation (LFTM) Program were also included. It should be noted that the Alton Parkway Extension Project Traffic Analysis provided a special analysis of General Plan build-out conditions, including the JAMF expansion. The General Plan build-out intersection LOS were referenced from this document. The LOS of intersections not included as part of this analysis were obtained from the Vacant Land Opportunities Phase III Study.

In order to determine the interim (2014) baseline volumes for the study area intersections, existing (2004) and future build-out (2030) a.m. and p.m. peak-hour volumes were obtained from the Alton Parkway Extension Project Traffic Analysis and the Vacant Land Opportunities Phase III Study. LSA derived the growth per year (i.e., 26 years of growth between 2004 and 2030) at each intersection and applied the growth to the existing volumes to determine 2014 baseline volumes. These interim volumes were interpolated based on straight-line growth over a 10-year period (i.e., 2004 to 2014). It should be noted that the Alton Parkway Extension EIR and the Vacant Land Opportunities Study did not include Fairbanks-Musick/Irvine Boulevard as one of the study area intersections. In order to generate interim volumes and LOS for this intersection, the growth at the two adjacent intersections (i.e., Alton Parkway/Irvine Boulevard and Bake Parkway/Trabuco Road) has been applied to the existing volumes provided in EIR 564.

Interim (2014) LOS. A summary of 2014 intersection LOS is shown in Table 5.C. The 2014 LOS worksheets are provided in Appendix D. The existing roadway network lane geometrics were used to calculate the 2014 intersection LOS. No planned future intersection improvements were assumed. As shown in Table 5.C, the following intersections are forecast to operate at unsatisfactory LOS according to City of Lake Forest standards:

- Bake Parkway/Trabuco Road (a.m. and p.m. peak hours)
- Bake Parkway/Jeronimo Road (a.m. peak hour)

General Plan Build-Out (2030) LOS. Future General Plan (County, Irvine and Lake Forest) build-out (2030) intersection LOS were referenced from the Alton Parkway Extension Project Traffic Analysis (March 2006) and the Vacant Land Opportunities Phase III Study (July 2005). As shown in Table 5.D, all study area intersections are forecast to operate at satisfactory LOS according to City of Irvine and Lake Forest standards, with the exception of Bake Parkway/Portola Parkway (i.e., LOS E during the p.m. peak hour). It should be noted that the deficient intersections under interim conditions improve to satisfactory levels at General Plan build out due to the following NITM improvements:

Table 5.C: Interim LOS Summary (2014)

			Base	eline		Plus Project ¹			
		AM Pea	ak Hour	PM Pea	ak Hour	AM Pe	ak Hour	PM Pe	ak Hour
Intersection		ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS
1	Sand Canyon Ave/Irvine Blvd	0.72	С	0.59	A	0.72	C	0.59	A
2	SR-133 SB Ramps/Irvine Blvd	0.64	В	0.42	A	0.64	В	0.42	A
3	SR-133 NB Ramps/Irvine Blvd	0.54	Α	0.59	A	0.54	A	0.59	A
4	Alton Pkwy/Irvine Blvd	0.61	В	0.70	В	0.61	В	0.71	C
5	Fairbanks-Musick/Irvine Blvd	0.51	Α	0.67	В	0.52	A	0.67	В
6	Bake Pkwy/Trabuco Rd	0.98	Е	0.93	E	0.99	Е	0.93	E
7	Lake Forest Dr/Trabuco Rd	0.77	С	0.89	D	0.77	С	0.89	D
8	Ridge Route Dr/Trabuco Rd	0.53	A	0.64	В	0.53	A	0.64	В
9	El Toro Rd/Trabuco Rd ²	0.79	С	0.80	C	0.79	C	0.80	C
10	Alton Pkwy/Toledo Way	0.57	A	0.60	A	0.57	A	0.60	A
11	Bake Pkwy/Toledo Way	0.89	D	0.65	В	0.89	D	0.65	В
12	Alton Pkwy/Jeronimo Rd	0.58	A	0.56	A	0.59	A	0.56	A
13	Bake Pkwy/Jeronimo Rd	0.96	Е	0.80	C	0.96	Е	0.80	C
14	Alton Pkwy/Muirlands Blvd	0.85	D	0.72	C	0.85	D	0.71	C
15	Bake Pkwy/Muirlands Blvd	0.66	В	0.73	C	0.66	В	0.73	C
16	Bake Pkwy/Rockfield Blvd	0.58	A	0.77	C	0.58	A	0.77	C
17	Barranca Pkwy/Irvine Center Dr	0.74	C	0.62	В	0.74	C	0.62	В
18	Irvine Center Dr/Alton Pkwy ³	0.87	D	0.85	D	0.87	D	0.85	D
19	I-5 NB Ramps/Alton Pkwy ³	0.84	D	0.42	A	0.84	D	0.42	A
20	Enterprise Dr/Alton Pkwy	0.77	С	0.80	C	0.78	C	0.80	C
21	I-5 NB Ramps/Bake Pkwy ⁴	0.81	D	0.68	В	0.82	D	0.68	В
22	I-5 SB Ramps/Bake Pkwy	0.80	С	0.85	D	0.81	D	0.85	D
23	Alton Pkwy/SR-241 Ramps	0.53	A	0.42	A	0.53	A	0.42	A
24	Bake Pkwy/Portola Pkwy	0.64	В	0.88	D	0.64	В	0.88	D

Notes: According to the Cities of Lake Forest and Irvine performance standards, a project impact occurs when the intersection in question exceeds acceptable LOS and the impact of the development is greater than 0.01 ICU.

= exceeds City of Lake Forest's and/or City of Irvine's LOS criteria

All interim volumes interpolated from existing and future volumes provided in: the Alton Parkway Extension Project Traffic Analysis (AFA, March 2006) and the Vacant Land Opportunities Phase III Study (AFA, July 2005).

Plus Project assumes Phase I of the JAMF expansion.

LOS D (0.81-0.90 ICU) is acceptable at all other locations.

I-5 = Interstate 5

ICU = intersection capacity utilization

LOS = level of service

NB = northbound

SB = southbound

SR-133 = State Route 133

SR-241 = State Route 241

² LOS E (0.91-1.00 ICU) is acceptable at this location (Congestion Management Program).

³ LOS E (0.91-1.00 ICU) is acceptable at this location (Irvine Planning Area 33 [Spectrum 1]).

⁴ LOS E (0.91-1.00 ICU) is acceptable at this location (Lake Forest General Plan).

Table 5.D: General Plan Build-Out (2030) LOS

			Plus P	roject						
		AM Pea	AM Peak Hour PM Peak Hour			AM Peak Hour		PM Pea	PM Peak Hour	
	Intersection	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	
1	Sand Canyon Ave/Irvine Blvd	0.73	С	0.75	С	0.74	С	0.75	C	
2	SR-133 SB Ramps/Irvine Blvd	0.85	D	0.58	A	0.85	D	0.58	A	
3	SR-133 NB Ramps/Irvine Blvd	0.75	C	0.70	В	0.75	C	0.70	В	
4	Alton Pkwy/Irvine Blvd	0.83	D	0.84	D	0.83	D	0.87	D	
5	Fairbanks-Musick/Irvine Blvd	0.69	В	0.83	D	0.73	C	0.85	D	
6	Bake Pkwy/Trabuco Rd	0.89	D	0.69	В	0.89	D	0.88	D	
7	Lake Forest Dr/Trabuco Rd	0.81	D	0.88	D	0.81	D	0.89	D	
8	Ridge Route Dr/Trabuco Rd ¹	0.60	A	0.68	В	0.60	A	0.68	В	
9	El Toro Rd/Trabuco Rd ^{1,2}	0.89	D	0.99	Е	0.89	D	1.00	Е	
10	Alton Pkwy/Toledo Way	0.62	В	0.77	С	0.62	В	0.78	C	
11	Bake Pkwy/Toledo Way	0.89	D	0.69	В	0.89	D	0.70	В	
12	Alton Pkwy/Jeronimo Rd	0.75	C	0.78	С	0.75	C	0.80	C	
13	Bake Pkwy/Jeronimo Rd	0.79	C	0.84	D	0.79	C	0.85	D	
14	Alton Pkwy/Muirlands Blvd	0.77	C	0.87	D	0.77	C	0.88	D	
15	Bake Pkwy/Muirlands Blvd	0.75	C	0.88	D	0.75	C	0.89	D	
16	Bake Pkwy/Rockfield Blvd	0.69	В	0.88	D	0.69	В	0.88	D	
17	Barranca Pkwy/Irvine Center Dr	0.90	D	0.80	С	0.90	D	0.81	D	
18	Irvine Center Dr/Alton Pkwy ³	0.87	D	0.97	Е	0.87	D	0.97	Е	
19	I-5 NB Ramps/Alton Pkwy ³	0.96	E	0.60	A	0.96	Е	0.61	В	
20	Enterprise Dr/Alton Pkwy	0.85	D	0.90	D	0.85	D	0.90	D	
21	I-5 NB Ramps/Bake Pkwy ⁴	0.87	D	0.95	Е	0.87	D	0.95	Е	
22	I-5 SB Ramps/Bake Pkwy	0.82	D	0.87	D	0.82	D	0.88	D	
23	Alton Pkwy/SR-241 Ramps	0.63	В	0.52	A	0.64	В	0.53	A	
24	Bake Pkwy/Portola Pkwy	0.63	В	0.92	Е	0.64	В	0.92	Е	

Notes: According to the Cities of Lake Forest and Irvine performance standards, a project impact occurs when the intersection in question exceeds acceptable LOS and the impact of the development is greater than 0.01 ICU.

ICU = intersection capacity utilization

LOS = level of service

NB = northbound

SB = southbound

⁼ exceeds City of Lake Forest's and/or City of Irvine's LOS criteria

¹Lake Forest General Plan baseline volumes and ICUs obtained from the Vacant Land Opportunities Phase III Study (AFA, July 2005). All other General Plan ICUs obtained from the Alton Parkway Extension Project Traffic Analysis (AFA, March 2006).

²LOS E (0.91-1.00 ICU) is acceptable at this location (Congestion Management Program).

³LOS E (0.91-1.00 ICU) is acceptable at this location (Irvine Planning Area 33 [Spectrum 1]).

⁴LOS E (0.91-1.00 ICU) is acceptable at this location (Lake Forest General Plan).

LOS D (0.81-0.90 ICU) is acceptable at all other locations.

- Bake Parkway/Trabuco Road the addition of a second northbound left-turn lane
- Bake Parkway/Jeronimo Road the addition of a second northbound left-turn lane

5.6.3 Project Trip Generation, Distribution, and Assignment

The existing JAMF has a 1,256-bed capacity (although the rated capacity is 713 beds). Under build-out conditions, the total number of beds provided on site is 7,584 (which also includes a Sheriff's Station and Interim Care Facility), consistent with the maximum number of beds analyzed and approved in EIR 564. Table 5.E presents the JAMF project trip generation summary. The total number of trips generated with build out of the JAMF is 5,457 average daily trips (ADT), 538 a.m. peak-hour trips, and 492 p.m. peak-hour trips, which was referenced from EIR 564. A maximum of 2,280 beds could be provided in Phase I in 2014 (i.e., the addition of up to1,024 beds from existing conditions). In order to calculate the Phase I trip generation, JAMF trip rates were determined by dividing the ADT, a.m. peak-hour trips (inbound and outbound), and p.m. peak-hour trips (inbound/outbound) by the total number of beds (i.e., 7,584). These derived rates were applied to the 1,024 beds that could be added during Phase I. The Phase I beds (and trips) represent approximately 13.5 percent of the JAMF build out. Therefore, Phase I could generate 737 ADT, 73 a.m. peak-hour trips, and 66 p.m. peak-hour trips by 2014.

Table 5.E: JAMF Trip Generation Summary

				AN	AM Peak Hour		PM Peak Hour		Iour
Land Use	Size	Unit	ADT	In	Out	Total	In	Out	Total
Trip Rates ¹									
Jail		bed	0.72	0.03	0.04	0.07	0.02	0.04	0.06
Build-out Tr	Build-out Trip Generation ¹								
Jail	7,584	beds	5,457	260	278	538	167	325	492
Phase I Trip Generation ²									
Jail	1,024	beds	737	35	38	73	22	44	66

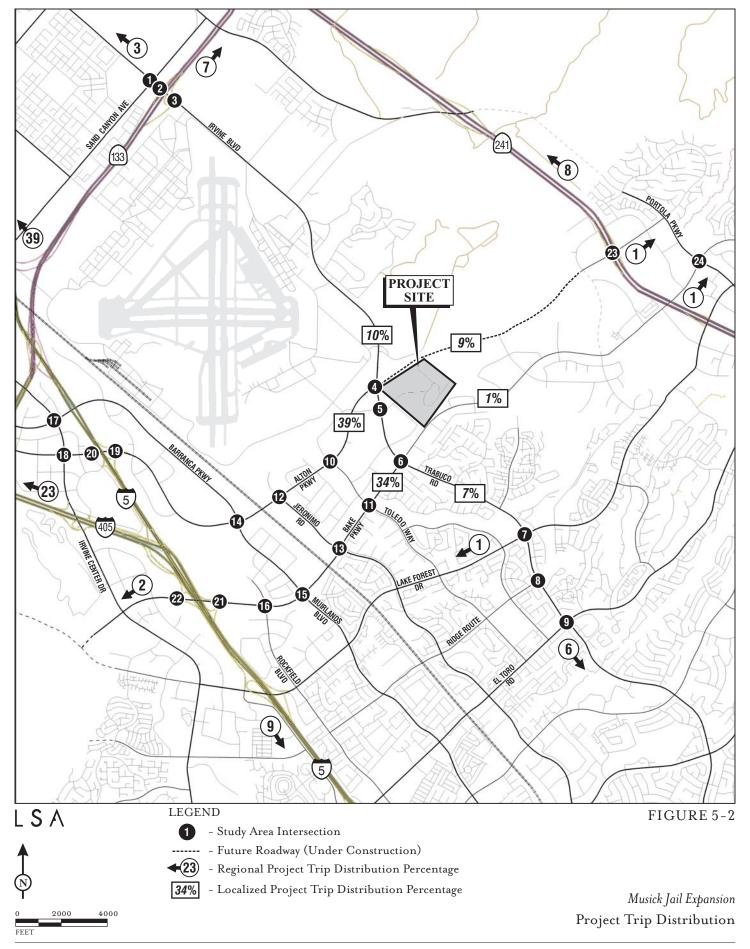
¹ Build-out trip generation referenced from the Musick Jail Expansion Traffic Analysis (AFA, August 1996).

ADT = average daily trips

Directions of approach to and departure from the JAMF site were determined based on the trip distribution percentages assumed in EIR 564. The JAMF trip distribution is illustrated in Figure 5-2. As shown in this figure, 65 percent of the JAMF trips are destined to the northwest (via I-5, I-405, and Irvine Boulevard), 17 percent to the north (via State Route 133 [SR-133], SR-241, Alton Parkway, and Bake Parkway), 15 percent to the southeast (via Trabuco Road and I-5), and 3 percent to the south (via Bake Parkway and Lake Forest Drive). The a.m. peak-hour trips and p.m. peak-hour trips were manually assigned to the study area intersections for purposes of determining interim plus project conditions and LOS. The results are discussed later in this report.

Trip rates determined by dividing the build-out trip generation by the total number of beds (i.e., 7,584 beds).

² Phase I trip generation interpolated from the build-out trip generation (i.e., 1,024 beds is approximately 13.5 percent of 7,584 beds).



5.6.4 Future Conditions With Proposed Project

Interim (2014) Plus Phase I Project LOS. Table 5.C presents the LOS summary of 2014 baseline and plus project (i.e., Phase I) conditions. As stated previously, the 2014 baseline volumes were interpolated from existing and future volumes. The 2014 plus project volumes were determined by manually assigning the Phase I trips associated with the JAMF expansion to the 2014 baseline volumes. The baseline volumes already include the existing 1,256 beds on the JAMF site. As shown in Table 5.C, two study area intersections are forecast to operate at an unsatisfactory LOS (LOS E) according to City of Lake Forest standards. However, the ICUs do not increase by greater than 0.01 with implementation of the project. Therefore, no significant project impacts are created during Phase I of the proposed JAMF expansion.

General Plan Build-Out (2030) Plus Project LOS. Table 5.D presents the LOS summary of 2030 baseline and plus project (i.e., build-out) conditions, which were referenced from the Alton Parkway Extension Project Traffic Analysis (March 2006) and the Vacant Land Opportunities Phase III Study (July 2005). The 2030 plus project LOS obtained from the Alton Parkway Analysis includes build out of the JAMF. For intersections that were not included as part of this analysis, the 2030 plus project volumes were determined by manually assigning the JAMF build-out trips to the 2030 baseline volumes. As shown in Table 5.D, four study area intersections are forecast to operate at unsatisfactory LOS (LOS E) according to City of Irvine and Lake Forest standards. However, the ICUs do not increase by more than 0.01 with implementation of the project. Therefore, no significant project impacts are created a result of the build out of the proposed JAMF expansion.

5.6.5 Mitigation

New Mitigation Measures. Based on the results of the intersection LOS analysis, expansion of the JAMF can be implemented without significantly impacting the surrounding roadway system in the 2014 (Phase I) and 2030 (build-out) horizons. The addition of project traffic during Phase I and build-out conditions will not exceed the City of Irvine and Lake Forest thresholds for performance and are not considered significant; thus, mitigation is not required.

Mitigation Measures From EIR 564. In light of changes in circumstances and setting, EIR 564 was reviewed to determine whether or not changes to the project setting would affect the mitigation measures contained therein. Based on the analysis and information above, changes to the mitigation measures found in EIR 564 are required. Mitigation measures related to transportation/circulation from EIR 564 are provided below with an update to their applicability.

The following mitigation measures have mostly been completed as part of the design for Alton Parkway and no longer apply to the project. Mitigation measure 45b will be installed once the Alton Parkway entrance is constructed.

29. At the time that final construction plans for the Alton Parkway signalized access are prepared, the Director of Public Works shall ensure that JAMF specifications require that bus turn aprons are located on each side of Alton Parkway and bus shelters are provided. The County of Orange will cooperate with the Orange County

Fire Authority (OCFA) in designing bus shelters for the jail which match as much as possible the bus shelters in Irvine Spectrum. These efforts shall take place prior to the occupation of the first jail building, and will be supervised by Environmental Management Agency or its successor agency.

- 49. Prior to or concurrent with the opening of the Alton Parkway entrance to employee and visitor access, the Director of Public Works shall ensure that the project specifications require that contractors install bus aprons on the northerly and southerly sides of Alton Parkway in a manner meeting the requirements of the OCTA, and a sidewalk is constructed along the southerly side of Alton Parkway from Irvine Boulevard to the project entrance on Alton Parkway, and along the project entry drive to the visitor entrance.
- 45. Prior to or concurrent with the occupancy of the first phase of the project, the Director of Public Works shall cause to be constructed or installed:
 - a. Two southbound left-turn lanes and one westbound right-turn lane at the intersection of Alton Parkway and Irvine Boulevard.
 - b. A traffic signal at the Alton Parkway project entrance to Complexes 1 and 2.

Mitigation measure 46 still applies as edited below.

With completion of the Alton Parkway Extension, three northbound through lanes and a free right-turn lane will be provided at Alton Parkway/Irvine Boulevard. These improvements will be in place prior to occupancy of Phase I in 2014. Therefore, the proposed conversion of the northbound through lane to the shared through/right-turn lane at Alton Parkway/Irvine Boulevard no longer applies and has been stricken from the text.

Based on the LOS analysis of Musick/Irvine Boulevard, a designated northbound right-turn lane is not required. With the current shared through/right-turn lane, this intersection operates at satisfactory LOS under existing, interim, and General Plan build-out conditions.

The recommended improvements at Bake Parkway/Irvine Boulevard are not required based on the LOS analysis, as implementation of Phase I would not result in a significant impact. It should be noted that the lane addition and lane conversion at Bake Parkway/Irvine Boulevard (i.e., NITM improvements) are assumed to be in place under General Plan build-out conditions, which results in satisfactory LOS.

- 46. Prior to or concurrent with the occupancy of the last phase of the project, the Director of Public Works shall negotiate agreements with the Cities of Irvine and Lake Forest, as applicable, to ensure that the County provides the project's pro rata share of costs of the following improvements:
 - a. Alton Parkway/Irvine Boulevard: Convert the third northbound through lane to a shared through/right-turn lane.
 - b. Musick Road/Irvine Boulevard: Add a northbound right-turn lane.

c. Bake Parkway/Irvine Boulevard: Add a northbound right-turn lane and convert the third northbound through lane to a shared through/right-turn lane.

d. Bake Parkway/Jeronimo Road: Provide an eastbound right-turn overlap signal phase.

Mitigation 48 still applies.

An eastbound right-turn overlap signal phase is not required at Bake Parkway/Jeronimo Road. Implementation of Phase I would not result in a significant impact. As stated previously, the planned NITM improvement at this intersection (i.e., the addition of a second northbound left-turn lane) would result in satisfactory LOS under General Plan build-out conditions.

Based on the results of this supplemental traffic analysis, this mitigation measure is still valid. According to EIR 564, government-owned facilities or utilities, such as the JAMF, that will not be used for generating revenue or commercial purposes are exempt from the transportation fee programs located within the vicinity of the JAMF. A Road Fee Program does not currently exist as described above. When such a program is adopted, the JAMF will be subject to these provisions.

48. Upon adoption of a Road Fee Program by the Board of Supervisors which includes the project site, the County shall pay the pro rata fee attributable to each project phase, or provide credits, prior to commencement of construction of the phase as required for the Musick Jail project under the Road Fee Program.

Mitigation measure 50 no longer applies.

The 1996 Master Plan had a total of 1,720 parking spaces for staff and visitors based on Mitigation Measure 50. The Revised Master Plan includes 1,397 parking spaces based on revised and updated parking information for the project. The 1,720 parking spaces were based on very high staffing estimates in 1994. Using current staffing and shift models, it was found that the site did not need the 1,720 parking spaces originally planned for the 1996 Master Plan and that the 1,397 planned parking spaces will be more than adequate for the site. Based on staffing, operations, shift overlap, and visitors Phase 1 will only require 485 parking spaces, a 16 percent reduction in needed parking spaces. In addition, programs such as video visitation will also reduce both the trips to the site and the number of parking spaces required. All parking at JAMF must be accommodated off-street and onsite due to the secure nature of the facility. Therefore, Mitigation Measure 50 is no longer required.

- 50. Prior to or concurrent with occupancy of each project phase, the Sheriffs Department shall ensure that sufficient parking spaces to meet the peak hour demand forecasted for that phase. The following summarizes the peak hour parking spaces required for each complex as analyzed herein:
 - Complex 1 and ancillary buildings: 580 off-street parking spaces
 - Sheriff's Station and ICF: 235 parking spaces
 - Complex 2: 375 parking spaces
 - Complex 3: 530 parking spaces

Mitigation measure 50a still applies. Alton Parkway is not designed to allow parking, and all parking associated with the JAMF will be contained on site.

50a. No parking will be allowed on Alton Parkway. So long as the segment of Alton Parkway in the vicinity of the jail is under County jurisdiction, the Orange County Sheriff will enforce this measure.

5.6.6 Findings Related to Transportation/Circulation

No New Significant Effects Requiring Major EIR Revisions. Based on the foregoing analysis and information, there is no evidence that changes in circumstances or setting necessitate a major change to EIR 564. Changes in circumstances and setting will not result in new significant environmental impacts to transportation/circulation, nor is there a substantial increase in the severity of impacts described in EIR 564.

No Substantial Change in Circumstances Requiring Major EIR Revisions. There is no information in the record or otherwise available that indicates that there are substantial changes in circumstances pertaining to transportation/circulation that would require major changes to EIR 564.

No New Information Showing Greater Significant Effects than EIR 564. This environmental analysis has analyzed all available relevant information to determine whether there is new information that was not available at the time EIR 564 was certified, indicating that a new significant effect not reported in that document may occur. Based on the information and analyses above, there is no substantial new information indicating that there will be a new significant impact to transportation/circulation requiring major revisions to EIR 564.

No New Information Showing Ability to Reduce Significant Effects in Previous EIR. There are no alternatives to the project or additional mitigation measures that would substantially reduce one or more significant impacts pertaining to transportation/circulation identified in and considered in EIR 564.

5.7 AIR QUALITY

Similar to Section 5.6, Transportation/Circulation, the format for this section differs from the other sections because new analysis is being incorporated. In order to analyze the impact of the Revised JAMF Master Plan on air quality, an updated air quality analysis was completed. This air quality analysis is the basis for the updated discussion in this section. The air quality analysis is included as Appendix E of this Supplemental EIR.

5.7.1 Existing Environmental Setting

The JAMF is located within the South Coast Air Basin (Basin), which is under the jurisdiction of the SCAQMD. The Basin comprises all of Orange County and the nondesert portions of Los Angeles,

Riverside, and San Bernardino Counties. Pursuant to the federal CAA of 1970, the EPA established national ambient air quality standards (NAAQS). The EPA has designated the Southern California Association of Governments (SCAG) as the Metropolitan Planning Organization (MPO) responsible for ensuring compliance with the requirements of the CAA for the Basin. The SCAQMD and SCAG are responsible for formulating and implementing the Air Quality Management Plan (AQMP) for the Basin. The SCAQMD adopted the 2003 AQMP in August 2003 and forwarded it to the California Air Resources Board (ARB) for review and approval. The ARB approved a modified version of the 2003 AQMP and forwarded it to the EPA in October 2003 for review and approval.

The 2003 AQMP updates the attainment demonstration for the federal standards for ozone (O_3) and PM_{10} ; replaces the 1997 attainment demonstration for the federal carbon monoxide (CO) standard and provides a basis for a maintenance plan for CO for the future; and updates the maintenance plan for the federal nitrogen dioxide and nitrogen oxides $(NO_2 \text{ and } NO_x)$ standard that the Basin has met since 1992. The 2003 AQMP proposes policies and measures to achieve federal and State standards for healthful air quality in the Basin.

This revision to the AQMP also addresses several State and federal planning requirements and incorporates significant new scientific data, primarily in the form of updated emissions inventories, ambient measurements, new meteorological episodes, and new air quality modeling tools. This AQMP is consistent with and builds upon the approaches taken in the 1997 AQMP and the 1999 Amendments to the O₃ State Implementation Plan (SIP) for the Basin for the attainment of the federal O₃ air quality standard. However, this revision points to the urgent need for additional emission reductions (beyond those incorporated in the 1997/1999 Plan) to offset increased emission estimates from mobile sources and meet all federal criteria pollutant standards within the time frames allowed under the federal CAA.

The SCAQMD adopted the 2007 AQMP on June 1, 2007, which it describes as a regional and multiagency effort (i.e., the SCAOMD Governing Board, ARB, SCAG, and EPA). State and federal planning requirements will include developing control strategies, attainment demonstration, reasonable further progress, and maintenance plans. The 2007 AQMP also incorporates new scientific data, primarily in the form of updated emissions inventories, ambient measurements, new meteorological episodes, and new air quality modeling tools. The ARB has adopted the SCAQMD 2007 AQMP as part of the 2007 SIP and forwarded it to the EPA for review and approval. The SCAQMD is awaiting the EPA's review and approval on its 2007 AQMP as part of the 2007 SIP and forwarded it to the EPA for review and approval. On November 8, 2010, EPA's Regional Administrator signed a proposed rule to approve in part and disapprove in part the South Coast 2007 PM_{2.5} plan. The parts of the plan prepared by the SCAQMD and the ARB that were proposed to be approved would strengthen the SIP. The portions of the plan that were proposed to be disapproved do not meet the requirements of the CAA and EPA. The EPA is taking public comments for 60 days after the publication of its action in the Federal Register. The SCAQMD is awaiting EPA's final approval on its 2007 AQMP as part of the 2007 SIP. Table 5.F summarizes the attainment status in the Basin for the major criteria pollutants.

Table 5.F: Attainment Status of Criteria Pollutants in the South Coast Air Basin

Pollutant	State	Federal
Ozone: 1-hour	Nonattainment	Revoked June 2005
Ozone: 8-hour	Not established	Severe-17 Nonattainment
PM_{10}	Nonattainment	Serious Nonattainment
$PM_{2.5}$	Nonattainment	Nonattainment
CO	Attainment	Attainment/Maintenance
NO_2	Attainment	Attainment/Maintenance
Lead	Attainment	Attainment
	(except Los Angeles County)	(except Los Angeles County)
All others	Attainment/Unclassified	Attainment/Unclassified

Source: ARB 2011 (http://www.arb.ca.gov/desig/desig.htm).

CO = carbon monoxide $NO_2 = nitrogen dioxide$

 $PM_{2.5}$ = particulate matter less than 2.5 microns in diameter PM_{10} = particulate matter less than 10 microns in diameter

Specific criteria for determining whether the potential air quality impacts of a project are significant are set forth in the SCAQMD's *CEQA Air Quality Handbook*. These criteria were discussed in EIR 564. SCAQMD has also adopted specific rules to reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (humanmade) fugitive dust sources. These rules apply to any activity or humanmade condition capable of generating fugitive dust within the Basin, including construction of the JAMF Master Plan. Therefore, the project is required to comply with regional rules that assist in reducing short-term air pollutant emissions. SCAQMD Rule 403 requires that fugitive dust be controlled with best available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. In addition, SCAQMD Rule 402 requires the implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off site. Applicable dust suppression techniques from Rule 403 are summarized below. Implementation of these dust suppression techniques can reduce the fugitive dust generation (and, thus, the PM₁₀ component). Compliance with these rules would reduce impacts on nearby sensitive receptors.

Applicable SCAQMD Rule 403 measures include the following:

- Apply nontoxic chemical soil stabilizers, according to manufacturers' specifications, to all inactive construction areas (previously graded areas inactive for 10 days or more).
- Water active sites at least twice daily. (Locations where grading is to occur will be thoroughly watered prior to earth moving.)
- All trucks hauling dirt, sand, soil, or other loose materials are to be covered, or should maintain at least 2 ft of freeboard, in accordance with the requirements of California Vehicle Code (CVC) Section 23114 (freeboard means vertical space between the top of the load and top of the trailer).

• Traffic speeds on all unpaved areas shall be reduced to 15 miles per hour (mph) or less. Low-sulfur fuel shall be used for stationary construction equipment. This is required by SCAQMD Rules 431.1 and 431.2.

The topic of GCC/GHGs is addressed in Section 4.3.

5.7.2 EIR 564

Section 5.2 of EIR 564 discusses the existing environmental setting for air quality. In 1996, federal and State standards for O₃, CO, NO_x, and PM₁₀ were not met in the Basin; thus, the Basin was considered a nonattainment area for those pollutants. At the time the 1996 EIR was prepared, the 1994 AQMP was the regulatory framework for achieving attainment of federal and State air quality standards in the Basin. According to the 1994 AQMP and consistent with the attainment time frames of the federal CAA amendments of 1990, attainment of all federal health standards was to occur no later than 2006 for PM₁₀, 1997 for CO, 1996 for NO_x, and 2010 for O₃. Attainment has been met for CO and NO_x, but not for PM₁₀. The attainment date for O₃ is still to come.

Based on the analysis presented in the 1996 EIR, it was determined that the project would represent approximately 0.06 percent or less of total Orange County emissions in 2010 and that the project emissions would exceed the SCAQMD threshold for NO_x and PM₁₀. Mitigation measures were included in the 1996 EIR to ensure compliance with the 1994 AQMP and were largely based on SCAQMD Rules 402 and 403 and known techniques to reduce NO_x. Based on SCAQMD's criteria for determining significance, EIR 564 determined that with mitigation measures, implementation of the 1996 JAMF Master Site Plan would not have project-specific or cumulatively significant impacts on air quality.

In addition, Recirculated EIR 564 included a cumulative air quality analysis and concluded that the project would result in cumulative impacts in the area of NO_x after Phase 1 implementation of the 1996 JAMF Site Plan. Findings and a Statement of Overriding Considerations were adopted for that impact among others.

5.7.3 Future Analysis Methodology/Approach

A number of modeling tools are available to assess air quality impacts of projects. In addition, certain air districts such as the SCAQMD have created guidelines and requirements to conduct air quality analysis. SCAQMD's current guidelines, the CEQA Air Quality Handbook (April 1993), were adhered to in the assessment of air quality impacts for the proposed project. The air quality models identified in EIR 564 are from 1996. To update that analysis, the current version of the CalEEMod model, Version 2011.1.1, was used in this analysis, incorporating data from the Supplemental Traffic Study (LSA, April 6, 2009) to estimate project-related mobile and stationary source emissions in this air quality assessment.

The air quality assessment includes estimating emissions associated with short-term construction and long-term operation of the proposed project. Criteria pollutants with regional impacts would be emitted by project-related vehicular trips, as well as by emissions associated with stationary sources used on site. Localized air quality impacts, i.e., higher CO concentrations (CO hot spots) near

intersections or roadway segments in the project vicinity, would be small and less than significant due to the generally low ambient CO concentrations in the project area. A local CO hot spot analysis was conducted. Project-specific information was used in the modeling. Default values representative of the proposed project were used when project-specific data were not available.

The net increase in pollutant emissions determines the significance and impact on regional air quality as a result of the proposed project. The results also allow the local government to determine whether the proposed project will deter the region from achieving the goal of reducing pollutants in accordance with the AQMP in order to comply with federal and State ambient air quality standards.

The SCAQMD has developed localized significance thresholds (LSTs) that can be used to determine whether or not a project may generate significant adverse localized air quality impacts. LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or State ambient air quality standard and are developed based on the ambient concentrations of that pollutant for each source receptor area (SRA). SCAQMD's current guidelines, *Final Localized Significance Threshold Methodology* (June 2003), were adhered to in the assessment of air quality impacts for the proposed project.

The LST mass rate look-up tables are used to determine whether the daily emissions for the proposed construction and operational activities could result in significant localized air quality impacts. The emissions of concern from construction activities are NO_X and CO combustion emissions from construction equipment and fugitive PM_{10} dust from construction site preparation activities. The primary emissions from operational activities include but are not limited to NO_X and CO combustion emissions from stationary sources and/or on-site mobile equipment. Off-site mobile emissions from the project are not included in the emissions compared to the LSTs.

5.7.4 Thresholds of Significance

Normally one would evaluate the adequacy of the original EIR based on the three-prong test enumerated in Section 15162 (this is discussed in detail in Chapter 1.0 of this Supplemental EIR) of the CEQA Guidelines. However, for air quality, in order to accurately analyze whether the project has a new or worse impact based on changed circumstances or new information, an updated air quality analysis has been completed. Based on Guidelines for the Implementation of California Environmental Quality Act, Appendix G, Public Resource Code Sections 15000–15387, a project would normally be considered to have a significant effect on air quality if the project would violate any ambient air quality standards, contribute substantially to an existing air quality violation, expose sensitive receptors to substantial pollutants concentrations, or conflict with adopted environmental plans and goals of the community in which it is located.

In addition to the federal and State AAQS, there are daily and quarterly emissions thresholds for construction and operation of a proposed project in the Basin. The Basin is administered by the SCAQMD, and guidelines and emissions thresholds established by the SCAQMD in its CEQA Air Quality Handbook (SCAQMD, April 1993) are used in this analysis. It should be noted that the emission thresholds were established based on the attainment status of the air basin in regard to air quality standards for specific criteria pollutants. Because the concentration standards were set at a level that protects public health with an adequate margin of safety (EPA), these emission thresholds

are regarded as conservative and would overstate an individual project's contribution to health risks. Table 5.G shows the CEQA significance thresholds that have been established for the Basin.

Projects in the Basin with construction- or operation-related emissions that exceed any of the emission thresholds should be considered to be significant under CEQA.

Table 5.G: SCAQMD Significance Thresholds

Air Pollutant	Construction Phase	Operational Phase
ROCs	75 lbs/day	55 lbs/day
CO	550 lbs/day	550 lbs/day
NO_X	100 lbs/day	55 lbs/day
SO_X	150 lbs/day	150 lbs/day
PM_{10}	150 lbs/day	150 lbs/day
PM _{2.5}	55 lbs/day	55 lbs/day

Source: SCAQMD 2009. CO = carbon monoxide lbs/day = pounds per day NO_X = nitrogen oxides

 $PM_{2.5}$ = particulate matter less than 2.5 microns in size PM_{10} = particulate matter less than 10 microns in size

ROCs = reactive organic compounds

SCAQMD = South Coast Air Quality Management District

 $SO_X = sulfur oxides$

Local Microscale Concentration Standards. The significance of localized project impacts under CEQA depends on whether ambient CO levels in the vicinity of the project are above or below State and federal CO standards. If ambient levels are below the standards, a project is considered to have a significant impact if project emissions result in an exceedance of one or more of these standards. If ambient levels already exceed a State or federal standard, project emissions are considered significant if they increase 1-hour CO concentrations by 1.0 part per million (ppm) or more or 8-hour CO concentrations by 0.45 ppm or more. The following are applicable local emission concentration standards for CO:

- California State 1-hour CO standard of 20.0 ppm
- California State 8-hour CO standard of 9.0 ppm

Thresholds for Localized Significance. For this project, the appropriate SRA is the Saddleback Valley area. LST analysis for construction is applicable to all projects of 5 ac or less. If emissions exceed the LST for a 5 ac site, air dispersion modeling needs to be conducted. While the total site is approximately 100 ac, the construction operations are limited to a small portion. Thus, for the LST analysis, 5 ac LST thresholds are used. The use of a 5 ac site model results in more stringent LSTs because emissions would occur in a more concentrated area closer to the nearest sensitive receptors than would occur in reality. Projects larger than 5 ac can determine the localized significance for construction by performing dispersion modeling for emissions that exceed the localized air quality standards.

LST receptor locations include residential, commercial, and industrial land use areas, and any other areas where persons can be situated for an hour or longer at a time. These other areas include parks, bus stops, and sidewalks, but would not include the tops of buildings, roadways, or permanent bodies of water such as oceans or lakes. For the purposes of a CEQA analysis, the SCAQMD considers a sensitive receptor to be a receptor such as residence, hospital, or convalescent facility where it is possible that an individual could remain for 24 hours. Commercial and industrial facilities are not included in the definition of a sensitive receptor because employees do not typically remain onsite for a full 24 hours, but are present for shorter periods of time, such as 8 hours. Therefore, applying a 24-hour standard for PM₁₀ is appropriate not only because the averaging period for the state standard is 24 hours, but because, according to the SCAQMD's definition, the sensitive receptor would be present at the location for the full 24 hours.

Since a sensitive receptor is considered to be present on site for 24 hours, LSTs based on shorter averaging times, such as the 1-hour NO₂ or the 1-hour and 8-hour CO ambient air quality standards, would also apply. However, LSTs based on shorter averaging periods, such as the NO₂ and CO LSTs, could also be applied to receptors such as industrial or commercial facilities since it is reasonable to assume that a worker at these sites could be present for periods of 1 to 8 hours. This assumption is consistent with the CO hotspots modeling protocol, which requires modeling at receptors that may also include commercial and industrial sites.

Thus, for situations where commercial or industrial sites are closer than sensitive receptors where an individual could remain for 24 hours, thresholds for CO and NO_2 should be for the distance to the commercial or industrial site and for PM_{10} and $PM_{2.5}$ for the distance to the sensitive receptor.

The closest existing sensitive receptors are approximately 1,000 ft (305 meters [m]) to the west of the project site; therefore, LST thresholds for PM_{10} and $PM_{2.5}$ were interpolated using the 200 and 500 m distances. Additionally, there are existing office/industrial uses approximately 100 ft adjacent to the project site. Thus, LST values for CO and NO_X at 25 m were used. Table 5.H shows the LST thresholds for the Saddleback Valley area.

Table 5.H: Saddleback Valley LST Thresholds

		Threshold	(lbs/day)
	Air Pollutant	Construction	Operation
CO	(at 25 meters)	1,804	1,804
NO_X	(at 25 meters)	197	197
PM_{10}	(at 460 meters)	138	34
$PM_{2.5}$	(at 460 meters)	82	20

Source: SCAQMD, 2011. CO = carbon monoxide lbs/day = pounds per day

LST = localized significance threshold

 NO_X = nitrogen oxides

 $PM_{2.5}$ = particulate matter less than 2.5 microns in size PM_{10} = particulate matter less than 10 microns in size SCAOMD = South Coast Air Quality Management District

5.7.5 Future Conditions With Proposed Project

Phase I (2014) Air Quality. Air quality impacts would occur during construction of the proposed project from soil disturbance and equipment exhaust. Major sources of emissions during grading and site preparation include: (1) exhaust emissions from construction vehicles; (2) equipment and fugitive dust generated by construction vehicles and equipment traveling over exposed surfaces; and (3) soil disturbances from grading and backfilling. The following summarizes construction emissions and associated impacts for the project site.

Construction Equipment Emissions. Construction activities produce combustion emissions from various sources such as utility engines, on-site heavy-duty construction vehicles, equipment hauling materials to and from the site, asphalt paving, and motor vehicles transporting the construction crew. Exhaust emissions from construction activities envisioned on site would vary daily as construction activity levels change. The use of construction equipment on site would result in localized exhaust emissions.

Construction activities associated with development occurring on the project site would temporarily increase localized PM₁₀, Reactive Organic Compounds (ROC), NO_X, and CO concentrations in the project vicinity. The primary sources of construction-related ROC and NO_X emissions are gasoline-and diesel-powered, heavy-duty mobile construction equipment such as scrapers and motor graders. Primary sources of PM₁₀ emissions would be clearing activities, excavation and grading operations, construction vehicle traffic on unpaved ground, and wind blowing over exposed earth surfaces.

Emissions generated from construction activities are anticipated to cause temporary increases in pollutant concentrations that could contribute to the continuing violations of the federal and State maximum concentration standards. The frequency and concentrations of such violations would depend on several factors, including the soil composition on the site, the amount of soil disturbed, wind speed, the number and type of machinery used, the construction schedule, and the proximity of other construction and demolition projects. Since this project consists of modifications to the existing industrial building and site, the construction equipment required will be much less than what is usually used for conventional warehouse construction.

Fugitive Dust. Fugitive dust emissions are generally associated with grading exposure, vehicle and equipment travel on unpaved roads, and dirt/debris pushing. Dust generated during construction activities would vary substantially depending on the level of activity, the specific operations, and weather conditions. Sensitive receptors such as residents and students in the project vicinity and onsite construction workers, may be exposed to blowing dust, depending on prevailing wind conditions.

Phase I Construction Emissions Summary. The CalEEMod model was used to calculate the construction emissions for Phase I, with the results shown in Table 5.I. While not all details of the construction schedule are known, only 1.1 ac will be graded, and development of the proposed project site will require a small amount of fill along the west-facing screen wall. Rough and final grading will occur prior to construction of any infrastructure.

Table 5.I: Peak-Day Construction Emissions for Phase I

	Total Regional Pollutant Emissions, lbs/day						
Construction Phase	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$	CO ₂ e
Demolition	10	84	51	0.09	17	4.0	9,600
Site Preparation	3.7	29	18	0.03	4.0	2.8	3,000
Grading	5.9	45	29	0.05	5.2	3.7	5,000
Building Construction	7.2	47	41	0.08	5.5	2.8	7,600
Architectural Coating	10	3.0	3.9	0	0.68	0.26	600
Paving	5.5	30	21	0.03	2.8	2.6	3,100
Peak Daily Emissions	17	84	51	0.09	17	4.0	9,600
SCAQMD Thresholds	75	100	550	150	150	55	No
Significant Emissions?	No	No	No	No	No	No	Threshold

Source: LSA Associates, Inc., June 2012.

CO = carbon monoxide

 CO_2e = carbon dioxide equivalent

lbs/day = pounds per day

 NO_x = nitrogen oxides

 $PM_{2.5}$ = particulate matter less than 2.5 microns in size

 PM_{10} = particulate matter less than 10 microns in size

ROG = reactive organic compounds

SCAQMD = South Coast Air Quality Management District

 $SO_x = sulfur oxides$

Additionally, while there is not expected to be any subterranean excavation (e.g., utility trenching and construction of water quality basins), it has been included in case some amount is needed.

Using an estimated schedule to characterize project construction, Table 5.I shows the daily construction emissions for Phase I. These emissions assume all standard construction control measures will be implemented, such as SCAQMD Rule 403 for dust control. Refer to Appendix E for construction analysis details. It is also assumed that the construction phases do not overlap, other than architectural coating, which will occur as part of the overall building construction.

Table 5.I shows that it is not expected for any of the SCAQMD daily emissions thresholds to be exceeded during construction for Phase I.

Build Out Construction Emissions Summary. Using an estimated schedule to characterize construction of the project, Table 5.J shows the daily construction emissions for project build out. These emissions assume that all standard construction control measures will be implemented, such as SCAQMD Rule 403 for dust control. Refer to Appendix E for construction analysis details. It is also assumed that the construction phases do not overlap, other than architectural coating, which will occur as part of the overall building construction operation. Table 5.J shows that it is not expected for any of the SCAQMD daily emissions thresholds to be exceeded during construction of project build out.

Table 5.J: Peak-Day Construction Emissions by Phase for Project Build Out

	Total Regional Pollutant Emissions, lbs/day						
Construction Phase	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$	CO ₂ e
Demolition	6.4	46	39	0.09	15	2.0	9,600
Site Preparation	2.4	17	13	0.03	3.2	2.0	3,000
Grading	3.8	25	24	0.05	4.6	2.4	5,000
Building Construction	11	65	93	0.28	22	2.9	27,000
Architectural Coating	34	2.1	9.5	0.02	3.2	0.22	2,400
Paving	3.0	17	20	0.03	1.3	1.1	3,100
Peak Daily Emissions	45	67	102	0.3	25	3.1	29,400
SCAQMD Thresholds	75	100	550	150	150	55	No
Significant Emissions?	No	No	No	No	No	No	Threshold

Source: LSA Associates, Inc., June 2012.

CO = carbon monoxide

 $CO_2e = carbon \ dioxide \ equivalent$

lbs/day = pounds per day NO_x = nitrogen oxides

 $PM_{2.5}$ = particulate matter less than 2.5 microns in size

 PM_{10} = particulate matter less than 10 microns in size

ROG = reactive organic compounds

SCAQMD = South Coast Air Quality Management District

 $SO_x = sulfur oxides$

Localized Significance Analysis. Table 5.K shows that the emissions of NO_X , CO, PM_{10} , and $PM_{2.5}$ on the peak day of construction for both Phase I and project build out will result in concentrations of these pollutants below LSTs.

Table 5.K: Construction LST Impacts (lbs/day)

Emissions Sources	NO _X	CO	PM_{10}	PM _{2.5}
Phase I On-site Emissions	71	43	5.4	3.7
Build Out On-site Emissions	40	34	4.4	2.4
LST Thresholds	197	1,804	138	82
Significant Emissions?	No	No	No	No

Source: LSA Associates, Inc., May 2012.

Source Receptor Area: Saddleback Valley, 4 ac, 100 ft distance ac = ac m = meters

CO = carbon monoxide $NO_X = nitrogen oxides$

ft = foot $PM_{2.5}$ = particulate matter less than 2.5 microns in size PM_{10} = particulate matter less than 10 microns in size

LST = local significance threshold

Thus, there is not expected to be a significant air quality impact from any aspect of construction of either Phase I or the project build out.

5.7.6 Long-Term Regional Air Quality Impacts

Regional Significance. Long-term air emission impacts are those associated with stationary sources and mobile sources involving any project-related change. The ARB- and EPA-approved model, CalEEMod, was used to calculate these emissions. The model was set to reflect the Basin parameters for 2009 and reflected all applicable regional default assumptions. The emission factors used by

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CalEEMod are from the ARB-approved EMFAC2007 model. Although project-specific variables may be used, regional defaults tend to be the most conservative and acceptable when evaluating programmatic impacts such as in this sustainability study. This computer model projects emissions rates for motor vehicles based on the year of analysis, a projected vehicle fleet mix, projected vehicle speeds, whether these emissions are projected to occur during the summer or the winter months, and other factors. These emissions were calculated using the projected ambient temperature range. Assumptions used in preparing the model analysis were consistent with those recommended in SCAQMD's CEQA Air Quality Handbook.

The proposed jail area source emissions include the combustion of natural gas for heating and the use of landscape maintenance equipment. Approximately 2,280 beds will be provided in Phase I in 2014 (i.e., the addition of 1,024 beds from existing conditions). The added 1,024 beds are expected to result in 737 additional ADT. Assuming the traffic rate from the existing 1,256 beds is the same as the rate used in the Supplemental Traffic Analysis (LSA, April 2009) for Phase I, the total ADT will be 1,641 trips. A summary of 2016 project emissions, a combination of the existing plus Phase I, is shown in Table 5.L, which shows that none of the pollutants will exceed the SCAQMD daily thresholds. Therefore, no significant air quality impact is anticipated, and no mitigation measures would be necessary. The 2016 CalEEMod worksheets are provided in Attachment A of Appendix E.

Table 5.L: Phase I Regional Operational Emissions

	Pollutant Emissions, lbs/day						
Category	ROG	NO_X	CO	SO _X	PM ₁₀	PM _{2.5}	
Area	8.9	0	0	0	0	0	
Energy	0.05	0.42	0.36	0	0.03	0.03	
Mobile	7.5	18	68	0.13	15	0.93	
Total Project Emissions	17	18	68	0.13	15	0.96	
SCAQMD Thresholds	55	55	550	150	150	55	
Significant?	No	No	No	No	No	No	

Source: LSA Associates, Inc., June 2012.

CO = carbon monoxide lbs/day = pounds per day $NO_x = nitrogen oxides$

 $PM_{2.5}$ = particulate matter less than 2.5 microns in size

 PM_{10} = particulate matter less than 10 microns in size

ROG = reactive organic compounds SCAQMD = South Coast Air Quality

Management District $SO_x = sulfur oxides$

General Plan Build-Out (2030) Air Quality. It is expected that the analysis of construction emissions above will also apply to the General Plan build out, because, while the end result of this phase will be a much larger facility, the daily construction operations characterized above for Phase I will apply throughout the construction of all of the proposed jail expansion.

Future General Plan build-out (2025) project emissions are shown in Table 5.M. The 2025 CalEEMod worksheets are provided in Attachment A of Appendix E. Under the build-out condition, the total number of beds provided on site is 7,584 (which includes the bed count from existing and Phase I, the Sheriff's Station and Interim Care Facility), consistent with the maximum number of beds analyzed and approved in EIR 564. This is expected to result in 5,457 ADT. As shown in Table 5.M, none of the pollutants will exceed the SCAOMD daily thresholds. Therefore, no significant air quality impact is anticipated, and no mitigation measures would be necessary.

Table 5.M: General Plan Build-Out Regional Operational Emissions

	Pollutant Emissions, lbs/day						
Category	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$	
Area	12	0	0	0	0	0	
Energy	0.53	4.8	4.1	0.03	0.37	0.37	
Mobile	16	35	120	0.40	45	2.5	
Total Project Emissions	29	40	120	0.43	45	2.9	
SCAQMD Thresholds	55	55	550	150	150	55	
Significant?	No	No	No	No	No	No	

Source: LSA Associates, Inc., June 2012.

Note: Due to an error in the CalEEMod model, the area ROG emissions reported above are listed in the model output in the unmitigated section whereas the rest of the output reported above are from the mitigated section.

CO = carbon monoxide ROG = reactive organic compounds lbs/day = pounds per day SCAQMD = South Coast Air Quality Management District

 $NO_x = nitrogen oxides$ $SO_x = sulfur oxides$

 $PM_{2.5}$ = particulate matter less than 2.5 microns in size PM_{10} = particulate matter less than 10 microns in size

Localized Significance. Table 5.N shows the calculated emissions for the on-site sources for the proposed operational activities compared with the appropriate LSTs. Following the SCAQMD methodology, this LST analysis only includes emissions produced on the project site, whereas the regional analysis includes both on-site and off-site emissions. The same model, CalEEMod, was used for this analysis; however, this model does not provide a way to single out the on-site emissions. The average trip length from the CalEEMod model ranges from 7.4 to 15.4 mi, and assuming a typical on-site travel distance of 500 ft (which is 0.6 to 1.3 percent of the total trip length), it was assumed that 2 percent of the total project traffic occurs on site. Table 5.N is the combination of the area sources shown in Tables 5.L and 5.M and the on-site portion of the mobile sources for each scenario.

Table 5.N: Summary of Operation Emissions, Localized Significance

	Emissions Rates (lbs/day)			
Scenario	CO	NO_X	PM_{10}	$PM_{2.5}$
Phase I On-site emissions	3.4	0.90	0.75	0.05
General Plan Build-Out On-site emissions	6.0	1.8	2.3	0.13
Localized Significance Threshold	1,804	197	24	13
Significant?	No	No	No	No

Source: LSA Associates, Inc., March 2009.

CO = carbon monoxide Lbs/day = pounds per day NO_x = nitrogen oxides

 PM_{10} = particulate matter less than 10 microns in size

 $PM_{2.5}$ = particulate matter less than 2.5 microns in size

Table 5.N shows that all operational emissions rates are below the LST thresholds for both Phase I operations and after the build out is completed. Therefore, the proposed operational activity will not cause any long-term, locally significant air quality impacts.

5.7.7 Analysis of Changes in Circumstances and Setting

Project air quality impacts can be divided into short-term impacts and long-term operational impacts. Short-term impacts consist of construction impacts, and long-term impacts consist of mobile sources (e.g., motor vehicle emissions) and stationary sources (e.g., emissions associated with electricity and natural gas consumption).

As described in Chapter 3.0 (Project Description) of this Supplemental EIR, build out of the JAMF Master Plan is anticipated to extend beyond 2020. Therefore, the incremental implementation after Phase I will likely occur over time in discrete building contracts as each funding opportunity or necessity arises. It is estimated that the earliest the project could be built out is 2020, but the build out will likely extend beyond that time frame. This incremental phasing and long time frame for build out would further decrease the potential for significant short-term air quality impacts.

Great Park EIR, 2011 Supplemental EIR, and 2012 Draft Supplemental EIR. According to the Orange County Great Park Program EIR, the project would have significant unavoidable short-term construction, operational, and cumulative air quality impacts that cannot be mitigated to less than significant. This was reiterated in the 2011 Supplemental EIR. The short-term impacts concern VOC, NO_x, CO, PM₁₀, and PM_{2.5}. The operational air quality impacts identified concern: VOC, NOX, CO, and PM_{2.5}. Due to the large scale of development of the Great Park, the variety of land uses, and uncertainties of build-out schedule, unavoidable adverse impacts in these areas are a reasonable assumption. However, these identified significant impacts do not change the disposition of the construction of the JAMF Master Plan due to the scale of development and the drawn-out timeline for completion of development.

Lake Forest Opportunities Study Program EIR and Supplemental EIR. Based on the Lake Forest Opportunities Study Program EIR, all of the new land uses that are planned to occur on Sites 1 through 7 are analyzed to determine whether the daily construction and/or operation emissions would exceed the SCAQMD's recommended thresholds of significance for the criteria pollutants. Both construction- and operation-related daily emissions associated with the development projects that are planned to occur on Sites 1 through 7 from implementation of the land use changes are anticipated to exceed SCAQMD significance thresholds for criteria pollutants for which the Basin is in nonattainment (O₃, PM_{2.5}, and PM₁₀). Under this condition, the development changes would also make a cumulatively considerable contribution to these criteria pollutants. Therefore, this impact is anticipated to be significant and unavoidable. These findings were substantiated in the Supplemental EIR. However, these identified significant impacts do not change the disposition of construction of the JAMF Master Plan due to the scale of development and the drawn-out timeline for completion of development.

Alton Parkway Extension EIR. According to the EIR, short-term, construction-related emissions of PM₁₀ and NO_x, during the peak construction period would remain significant after mitigation. This could result in impacts to workers and residents at the Musick Facility. These significant unavoidable impacts would be temporary, occurring only during construction of the Alton Parkway Extension. No significant long-term air quality impacts would result with implementation of the Alton Parkway

Extension Project. The Alton Parkway Extension Project is now completed and the JAMF Master Plan Phase I is not under construction. Therefore, this impact has no effect on the conclusions in EIR 564.

5.7.8 Mitigation Measures from EIR 564

In light of changes in circumstances and setting, EIR 564 was reviewed to determine whether or not changes to the project setting would affect the mitigation measures contained therein. Based on the analysis and information above, no changes to the mitigation measures found in EIR 564 are required. As discussed above, these mitigation measures implement SCAQMD Rules 402 and 403. However, two mitigation measures identified in EIR 564 would no longer be applicable to the project. These are discussed below. Mitigation measures related to air quality that would be applicable to the proposed JAMF Master Plan implementation are listed below. Note that the responsible party has changed in the measures concerning the construction management.

Applicable mitigation measures include the following:

- 2. At the time that project grading and construction jobs are bid, the Director of Public Works Orange County Sheriff's Department Research and Development Director or designee shall ensure that project specifications require that contractors use low emission mobile construction equipment, where feasible.
- 4. At the time that project grading and construction jobs are bid, the Director of Public Works Orange County Sheriff's Department Research and Development Director or designee shall ensure that project specifications require that contractors water the graded sites and that equipment is cleaned morning and evening.
- 5. At the time that project grading and construction jobs are bid, the Director of Public Works Orange County Sheriff's Department Research and Development Director or designee shall ensure that project specifications require that contractors wash off trucks leaving the site.
- 6. At the time that project grading and construction jobs are bid, the Director of Public Works Orange County Sheriff's Department Research and Development Director or designee shall ensure that project specifications require that contractors spread soil binders on graded sites, unpaved roads and parking areas.
- 7. At the time that project grading and construction jobs are bid, the Director of Public Works Orange County Sheriff's Department Research and Development Director or designee shall ensure that project specifications require that chemical soil stabilizers are applied by contractors according to manufacturer1s specifications to all inactive construction areas (previously graded areas which remain inactive for 96 hours).
- 8. At the time that project grading and construction jobs are bid, the Director of Public Works Orange County Sheriff's Department Research and Development Director or designee shall ensure that project specifications require that ground cover planting be established on the construction site by contractors through seeding and watering

- on portions of the site that will not be disturbed for lengthy periods (such as two months or more).
- 9. At the time that project grading and construction jobs are bid, the Director of Public Works shall ensure that project specifications require the contractor to sweep streets if silt is carried over to adjacent public thoroughfares. This measure prevents emissions rather than reduce emissions.
- 10. At the time that project grading and construction jobs are bid, the Director of Public Works Orange County Sheriff's Department Research and Development Director or designee shall ensure that project specifications require contractors to limit traffic speeds on all unpaved road surfaces to 15 miles per hour or less.
- 11. At the time that project grading and construction jobs are bid, the Director of Public Works Orange County Sheriff's Department Research and Development Director or designee shall ensure that project specifications require contractors to suspend grading operations during first and second stage smog alerts.
- 12. At the time that project grading and construction jobs are bid, the Director of Public Works Orange County Sheriff's Department Research and Development Director or designee shall ensure that project specifications require contractors to suspend all grading operations when wind speeds (as instantaneous gusts) exceed 25 miles per hour.
- 13. At the time that project grading and construction jobs are bid, the Director of Public Works Orange County Sheriff's Department Research and Development Director or designee shall ensure that project specifications require that contractors maintain construction equipment engines by keeping them tuned.
- 15. At the time that project grading and construction jobs are bid, the Director of Public Works Orange County Sheriff's Department Research and Development Director or designee shall ensure that project specifications require that contractors provide onsite power sources during the early stages of the project to minimize or eliminate the use of portable generators.
- 16. At the time that project grading and construction jobs are bid, the Director of Public Works Orange County Sheriff's Department Research and Development Director or designee shall ensure that project specifications require that contractors utilize existing power sources (e.g., power poles) or clean fuel generators rather than temporary power generators.
- 17. At the time that project grading and construction jobs are bid, the Director of Public Works Orange County Sheriff's Department Research and Development Director or designee shall ensure that project specifications require contractors to use low emission on-site stationary equipment (e.g., clean fuels).

No-longer-applicable mitigation measures include the following:

3. At the time that project grading and construction jobs are bid, the Director of Public Works shall ensure that the project specifications require the contractors to comply with SCAQMD Rule 2202.

14. At the time that project grading and construction jobs are bid, the Director of Public Works shall ensure that project specifications require that contractors use low sulfur fuel for stationary construction equipment.

Rule 2202 is now a voluntary program that the County implements on a countywide basis. The County implements trip reduction practices only if the construction site has traffic constraints, which the JAMF site does not. Only low-sulfur fuel is available in California.

5.7.9 Findings Related to Air Quality

No New Significant Effects Requiring Major EIR Revisions. Based on the foregoing analysis and information, there is no evidence that changes in circumstances or setting necessitate a major change to EIR 564. Changes in circumstances and setting will not result in new significant environmental impacts to air quality, nor is there a substantial increase in the severity of impacts described in EIR 564.

No Substantial Change in Circumstances Requiring Major EIR Revisions. There is no information in the record or otherwise available that indicates that there are substantial changes in circumstances pertaining to air quality that would require major changes to EIR 564.

No New Information Showing Greater Significant Effects than EIR 564. This environmental analysis has analyzed all available relevant information to determine whether there is new information that was not available at the time EIR 564 was certified, indicating that a new significant effect not reported in that document may occur. Based on the information and analyses above, there is no substantial new information indicating that there will be a new significant impact to air quality requiring major revisions to EIR 564.

No New Information Showing Ability to Reduce Significant Effects in Previous EIR. There are no alternatives to the project or additional mitigation measures that would substantially reduce one or more significant impacts pertaining to air quality identified and considered in EIR 564.

5.8 NOISE

EIR 564 provided a complete noise environmental setting, which is incorporated herein by reference. The setting information and analyses from EIR 564 are summarized below and focused on any changes to this topic since EIR 564. Additionally, the Alton Parkway Extension Project EIR 585 (Alton Parkway 2006 EIR) is also helpful in providing an existing setting and analyzing potential noise impacts related to the JAMF Master Plan; it is also included in the summarization and analysis

below, and is herein incorporated by reference. It should be noted that the primary noise source associated with the analysis in EIR 564 was from overflights associated with the then-proposed airport at MCAS El Toro. Without the airport use, the only noise sources in the vicinity are from roadways.

5.8.1 Existing Environmental Setting

The JAMF site is impacted by noise from ongoing jail activities and nearby roadways. In addition, the project area and residential areas southeast of the project site have been historically exposed to very high military aircraft noise levels. As stated above, MCAS El Toro was designated for closing by the Base Realignment and Closure Commission in 1993. The station officially closed on July 2, 1999, and thereafter aircraft noise halted. Thereafter, the Airport Land Use Commission declared that the MCAS El Toro noise contours were no longer applicable. The jail itself does not generate unusually loud noise.

The nearest sensitive receptors (residences) are located approximately 700 ft from the boundary of the project site.

The land use compatibility standards of the County of Orange, City of Irvine, and City of Lake Forest establish 60 A-weighted decibels (dBA) as an acceptable exterior noise exposure level for the types of land uses identified above as sensitive receptors. In addition, the County of Orange establishes 65 dBA Community Noise Equivalent Level (CNEL) as an acceptable exterior noise exposure level for group homes such as the JAMF. The measure dBA CNEL is a 24-hour A-weighted average sound level from midnight to midnight obtained after the addition of 5 decibels (dB) to sound levels occurring between 7:00 p.m. and 10:00 p.m. and 10 dB to sound levels occurring between 10:00 p.m. and 7:00 a.m. The 5 dB and 10 dB penalties added to the evening and nighttime hours account for the added sensitivity of humans to noise during these time periods.

The only existing roadway that impacts the site directly is Bake Parkway. Noise exposure levels from Bake Parkway were included in EIR 585. The 65 CNEL is 239 ft from the centerline of Bake Parkway according to Table 3.6-7 of EIR 585. The only area of the JAMF site that is susceptible to roadway noise from Bake Parkway that exceeds the 65 CNEL standard is the southern corner of the site, where the future access from Bake Parkway will be located (at the intersection of South Pointe Drive). Agricultural land uses are currently located in this area. In addition, the 65 CNEL exterior noise standard would only apply to "outdoor living areas" as defined in the County's Noise Element. Jails are not considered to have outdoor living areas and therefore are not subject to an exterior noise standard.

The noise ordinances of the County of Orange and City of Lake Forest provide an exemption for temporary construction-related noise impacts occurring between 7:00 a.m. and 8:00 p.m. on Monday through Saturday. Likewise, the City of Irvine's noise ordinance provides an exemption for construction-related activities that occur between 7:00 a.m. and 7:00 p.m. Monday through Friday and between 9:00 a.m. and 6:00 p.m. on Saturday. Construction activity cannot occur in any of these jurisdictions at any time on Sundays or federal holidays.

5.8.2 EIR 564

The County uses CNEL to assess the compatibility of residential land uses with the noise environment. The County's Noise Element requires that the exterior living areas (e.g., yards, patios) for residential uses not exceed 65 dBA CNEL, and that interior noise levels not exceed 45 dBA CNEL. These noise standards for commercial and industrial uses vary by type of use. At the time EIR 564 was prepared, the project site was impacted by transportation noise from military aircraft, nearby roadways, and ongoing jail activities. EIR 564 assumed that a civilian airport could replace the previous MCAS El Toro, and therefore the JAMF site could still be subject to overflight noise. EIR 564 explains that the County does not consider a jail facility to have "outdoor living areas" subject to exterior noise standards. Therefore, the County would only have to meet the 45 dBA CNEL interior noise standard. That standard will be met through the design of the buildings and is also required as Mitigation Measure No. 38.

EIR 564 determined that noise generated from construction activities would not significantly impact the nearby sensitive receptors (residences) as long as construction activity is limited to daytime hours, as specified by the County ordinance, and construction traffic is not permitted on local residential streets.

EIR 564 evaluated increases in noise levels as a result of project-related traffic increases. The EIR determined that the greatest increase in noise projected is 0.3 dBA, which would occur along Alton Parkway between Toledo Way and Trabuco Road. This increase is less than the noise threshold and would not be discernible to nearby residents. Therefore, increases in noise-related to project-related traffic increases were found to be less than significant. Further, EIR 564 determined that all other project noise source impacts on surrounding land uses were less than significant and that anticipated noise levels on site would also be less than significant.

Mitigation was included in EIR 564, requiring adherence to County standards, noise reduction techniques during construction, and use compatibility determination for the ICF (see Mitigation Measure No. 39). With implementation of required mitigation measures, all impacts related to noise are reduced to below a level of significance.

5.8.3 Analysis of Changes in Circumstances and Setting

As discussed previously, the JAMF site is no longer subject to noise from military overflights of MCAS El Toro or the future civilian airport discussed in EIR 564. The site is no longer located within 2 mi of a public or private airstrip. The noise in the prior analyses' attributable to aircraft is no longer present. Therefore, the proposed project is not expected to result in a significant impact related to noise.

The living facilities at the existing JAMF would be located approximately 600 ft from the Alton Parkway alignment. As described in the Alton Parkway Extension EIR (2006), living facilities at the jail are anticipated to experience a noise level of less than 65 dBA as a result of traffic along either Alton Parkway or Bake Parkway, and as discussed earlier, the living quarters are required to meet only the interior standard of 45 dBA CNEL. The design of the housing units (jail and worker housing) of the JAMF Master Plan would meet all interior noise standards, would have mechanical ventilation and windows that would not open, and would reasonably not be located on the immediate

perimeter of the property. As such, noise impacts associated with traffic volumes along Alton Parkway or Bake Parkway would not be a significant impact on the future JAMF living quarters.

Great Park EIR, 2011 Supplemental EIR, and 2012 Draft Supplemental EIR. The Orange County Great Park Program EIR stated: "the Musick Branch Jail generates noise associated with vehicles trips to and from the jail and from stationary sources and activities associated with the jail." The EIR concluded that there would be no significant noise impacts from the Great Park Plan, either individually or cumulatively. This was further substantiated in the 2011 Supplemental EIR. No mitigation measures were necessary, only project design for certain noise sensitive land uses. The only noise associated with the development would be from traffic. Traffic noise is not projected to be significant. Therefore, the noise environment associated with the Great Park would not change EIR 564's conclusion that the JAMF site would not be exposed to excessive or significant noise levels. Nor would it change the conclusion that noise generated on site will create no significant impacts.

Lake Forest Opportunities Study Program EIR and Supplemental EIR. Full build out of the Lake Forest General Plan with the land use conversions would increase roadway noise levels over existing conditions. The EIR concluded that the increase (as much as 11.5 dBA CNEL) in roadway noise was great enough to be considered significant. While the project contribution may be less than cumulatively considerable when compared to the 2030 General Plan scenario, noise has been classified as a significant and unavoidable cumulative impact based on a comparison of the 2030 project scenario with existing conditions. Noise was not analyzed in the Supplemental EIR. This conclusion does not change the conclusion of EIR 564 since the only area that would be exposed to a roadway in Lake Forest is the area in the JAMF Master Plan fronting Bake Parkway. This area includes the Southeast Sheriff's Station and associated parking structure. Neither of these uses is noise-sensitive. The ICF is planned to be north of the parking structure, and will be approximately 450 ft from Bake Parkway and situated behind existing office buildings. Therefore, future cumulative noise conditions associated with the City of Lake Forest General Plan build out will not impact the JAMF Master Plan.

Alton Parkway Extension EIR. The Alton Parkway Extension EIR concluded that implementation of the project would not result in significant noise impacts during either the construction or the operational phase. Compliance with the applicable standard conditions would be required to ensure that construction activities are consistent with the local noise ordinances. The Alton Parkway analysis does not change the analysis or disposition of the mitigation measures in EIR 564.

5.8.4 Mitigation Measures from EIR 564

In light of changes in circumstances and setting, EIR 564 was reviewed to determine whether or not changes to the project setting would affect the mitigation measures contained therein. Based on the analysis and information above, no changes to the mitigation measures found in EIR 564 are required. Mitigation measures related to noise that would be applicable to the proposed JAMF Master Plan are provided below.

34. At the time that project grading and construction jobs are bid, the Director of Public Works shall ensure that project specifications require contractors to comply with the County of Orange Noise Ordinances and standard conditions of approval. This will result in restricting the hours and days of construction per the local ordinance.

- 35. If any on-site public address systems, bells, or other audible signal systems are used in new buildings, they should be designed to be inaudible in the adjacent residential areas or prohibited. If any such devices are included in the project, the Director of Public Works shall ensure that project specifications require installation to comply with the requirements of the Orange County Noise Ordinance, except for emergency warning devices.
- 36. At the time that project grading and construction jobs are bid, the Director of Public Works shall ensure that final plans require that ingress and egress should be taken only on arterial highways or industrial collector streets and should not utilize any residential streets. This includes service vehicles as well as all other jail traffic.
- 37. At the time that project grading and construction jobs are bid, the Director of Public Works shall ensure that project specifications require contractors install mechanical equipment including the Central Plant, to conform to the requirements of the Orange County Noise Ordinance.
- 38. At the time of final construction plan development, the Director of Public Works shall ensure that plan specifications require that interior noise levels including noise sensitive interior areas (per the County of Orange Noise Element) shall comply with County standards.
- 39. Prior to establishing the Interim Care facility at this site, the County of Orange Health Care Agency shall determine whether the noise environment is acceptable with the therapeutic mission undertaken at this facility.

5.8.5 Findings Related to Noise

No New Significant Effects Requiring Major EIR Revisions. Based on the foregoing analysis and information, there is no evidence that changes in circumstances or setting necessitate a major change to EIR 564. Changes in circumstances and setting will not result in new significant environmental impacts related to noise, nor is there a substantial increase in the severity of impacts described in EIR 564.

No Substantial Change in Circumstances Requiring Major EIR Revisions. There is no information in the record or otherwise available that indicates that there are substantial changes in circumstances pertaining to noise that would require major changes to EIR 564.

No New Information Showing Greater Significant Effects than EIR 564. This environmental analysis has analyzed all available relevant information to determine whether there is new

information that was not available at the time EIR 564 was certified, indicating that a new significant effect not reported in that document may occur. Based on the information and analyses above, there is no substantial new information indicating that there will be a new significant impact related to noise requiring major revisions to EIR 564.

No New Information Showing Ability to Reduce Significant Effects in Previous EIR. There are no alternatives to the project or additional mitigation measures that would substantially reduce one or more significant impacts pertaining to noise identified in and considered by EIR 564.

5.9 BIOLOGICAL RESOURCES

EIR 564 provided an environmental setting for biological resources, which is incorporated herein by reference. The setting information and analyses from EIR 564 are summarized below and focus on any changes to this topic since EIR 564. Additionally, the Alton Parkway Extension Project EIR 585 is also helpful in providing an existing setting and analyzing potential biological resources impacts related to the JAMF Master Plan, is also included in the summarization and analysis below, and is herein incorporated by reference.

5.9.1 Existing Environmental Setting

The JAMF site is located on a highly modified agricultural site, with no remaining natural resources. Borrego Wash, adjacent to the west of the site, will not be affected by the jail expansion project. Effects on Borrego Wash by the adjacent Alton Parkway Extension Project are fully evaluated in the Alton Parkway Extension Project EIR 585 and determined to be less than significant with mitigation incorporated.

The project site is located to the south of the boundaries of the Orange County Central/Coastal Subregion NCCP/Habitat Conservation Plan (HCP) (approved in July 1996), a State program designed to protect critical habitat through a comprehensive management and conservation program while at the same time allowing compatible land uses and reasonable economic development. An open space buffer area separates the project site from the NCCP/HCP area.

5.9.2 EIR 564

EIR 564 determined that there would be no impacts to biological resources on the JAMF site from development of the jail expansion project. Because the site is either developed with jail facilities or being used for agricultural operations, no biological resources impacts are expected to occur on the site.

5.9.3 Analysis of Changes in Circumstances and Setting

There have not been substantive changes in circumstance or setting related to potential biological resources since EIR 564 was certified. The jail expansion project would provide for the same size and

type of jail facility expansion that was evaluated in EIR 564. There are no changes to the existing setting or the proposed project that would affect biological resources.

The project site is adjacent to, but outside of, the NCCP/HCP area. The jail expansion project would not have any effect on or conflict with the provisions of the HCP. Therefore, the project would be consistent with the NCCP/HCP, and no impacts would result from project implementation.

Since there are no known or observed sensitive biological resources within the project site, the JAMF Master Plan would not result in a significant impact to biological resources, and no mitigation is necessary. Therefore, there are no changes in circumstances or setting that require any major changes to EIR 564, and no new significant environmental impacts would result.

Great Park EIR, 2011 Supplemental EIR, and 2012 Draft Supplemental EIR. The Orange County Great Park Program EIR concludes that all potential impacts to biological resources would be mitigated to a less than significant level. With a proposed wildlife corridor, proposed park uses, and the adjacency of the NCCP Central/Coastal Reserve, the flora and fauna of the former MCAS El Toro would not be significantly impacted. No changes to the biological resources analysis or disposition of mitigation measures would occur as a result of the conclusion in the Great Park EIR or the 2011 Supplemental EIR.

Lake Forest Opportunities Study Program EIR and Supplemental EIR. The Program EIR concludes that all impacts to biological resources can be mitigated to a less than significant level. The EIR also states that the cumulative contextual area for complying with local policies and/or ordinances protecting biological resources is the City of Lake Forest, which is the area within which the General Plan and/or any applicable ordinances would apply. The Supplemental EIR did not analyze biological impacts. It is assumed that as part of the development review and entitlement process, the City would ensure compliance with any and all applicable local policies and/or ordinances since they were developed for the primary purpose of providing a framework for future development. Therefore, the cumulative impact is anticipated to be less than significant. Thus, the analysis in the referenced EIR related to biological resources would not change the circumstances of the 1996 Master Site Plan or the JAME Master Plan.

Alton Parkway Extension EIR. The alignment of the Alton Parkway Extension traverses the NCCP Central/Coastal Reserve and also several undeveloped parcels which contain habitat. The analysis concludes that the identified biological resources mitigation measures in EIR 585 would reduce all the impacts to a less than significant level. As discussed above, the JAMF site has very little natural vegetation due to the agricultural uses on site. Therefore, the analysis in EIR 585 related to biological resources would not change the circumstances of the 1996 Master Site Plan or the JAMF Master Plan.

5.9.4 Mitigation Measure from EIR 564

In light of changes in circumstances and setting, EIR 564 was reviewed to determine whether changes to the project setting would affect the mitigation measures contained therein. Based on the analysis and information above, Mitigation Measure No. 40 in EIR 564 is no longer required. Mitigation

Measure No. 40, related to the Alton Parkway Extension Project affecting wetlands in Borrego Canyon Wash, is not applicable to the JAMF Master Plan because it is related to impacts from the Alton Parkway Extension Project and, accordingly, is addressed in EIR 585.

40. Prior to the construction of any portion of Alton Parkway affecting wetlands in Borrego Wash, the County of Orange shall enter into a Streambed Alteration Agreement with the California Department of Fish & Game and obtain any necessary federal authorization. This agreement will call for the compensation of wetland losses through off-site habitat creation or participation in a wetlands credit bank. If determined necessary by the Department of Fish and Game, the small vegetated area at southwest corner of the site will also be mitigated.

Although Phase 1 would not require the removal trees on the JAMF property, the removal of trees during construction could interfere with nesting birds. The federal Migratory Bird Treaty Act (MBTA) provides for the protection of migratory birds, including any part, nest, or egg of a migratory bird. Raptors are included in migratory bird species that may nest in large ornamental trees within the project area. Therefore, the following mitigation measure has been added to the mitigation measures for the project if construction near or the removal of trees takes place during bird nesting season (January 15–August 31). The measure ensures compliance with the MBTA.

Mitigation Measure Bio-1

Potential impacts to raptors and other nesting birds should be avoided by conducting a preconstruction survey and removing or trimming trees outside of the raptor nesting season (January 15–August 31). If construction is necessary during the raptor nesting period, a survey for active nests should be conducted by a qualified biologist. If an active nest is observed within the vicinity, a buffer of 150 ft from the nest will need to be delineated to ensure that no direct impacts will occur to nesting raptors. The buffer will be delineated by roping the boundaries of construction and shall remain in place until the nest is either abandoned or the young have fledged.

5.9.5 Findings Related to Biological Resources

No New Significant Effects Requiring Major EIR Revisions. Based on the foregoing analysis and information, there is no evidence that changes in circumstances or setting necessitate a major change to EIR 564. Changes in circumstances and setting will not result in new significant environmental impacts to biological resources, nor is there a substantial increase in the severity of impacts described in EIR 564.

No Substantial Change in Circumstances Requiring Major EIR Revisions. There is no information in the record or otherwise available that indicates that there are substantial changes in circumstances pertaining to biological resources that would require major changes to EIR 564.

No New Information Showing Greater Significant Effects than EIR 564. This environmental analysis has analyzed all available relevant information to determine whether there is new information that was not available at the time the EIR 564 was certified, indicating that a new

significant effect not reported in that document may occur. Based on the information and analyses above, there is no substantial new information indicating that there will be a new significant impact to biological resources requiring major revisions to EIR 564.

No New Information Showing Ability to Reduce Significant Effects in Previous EIR. There are no alternatives to the project or additional mitigation measures that would substantially reduce one or more significant impacts pertaining to biological resources identified and considered in EIR 564.

5.10 AESTHETICS

EIR 564 provided an environmental setting for aesthetics and light and glare, which is incorporated herein by reference. The setting information and analyses from EIR 564 are summarized below and focused on any changes to this topic since EIR 564. Additionally, the Alton Parkway Extension Project EIR 585 is also helpful in providing an existing setting and analyzing potential aesthetic impacts related to the JAMF Master Plan, is also included in the summarization and analysis below, and is herein incorporated by reference.

Also, the County has been in continuous contact with the Cities of Irvine and Lake Forest regarding the expansion of the JAMF. On one occasion, officials from the City of Lake Forest were invited to the JAMF property to examine the potential visual effects to neighboring communities. The visit included the use of height reference points to show that the proposed buildings on site would not be visible from off-site vantage points in the City of Lake Forest.

5.10.1 Existing Environmental Setting

The project site is currently being used for jail purposes. The project site is either developed with jail facilities or is being used by the jail for agricultural production. Visible characteristics of the existing site include large agricultural plots, trees, a small knoll containing a reservoir, and low-rise buildings. Currently, there is limited opportunity to view the project site from off-site land uses. Views of the site are currently obscured by terrain, trees, and nearby commercial and industrial buildings. Figure 5-3 is view key and Figure 5-4 show existing views around JAMF.Lighting at the current facility is minimal, confined to the area around the buildings, and directed toward the buildings. The existing lighting is not directed outward from the site.

Additionally, agricultural production borders the JAMF to the north and west. Further east of the JAMF is undeveloped land, which is part of the Reserve area. Located south of Commercentre Drive are research and industrial buildings. Approximately 700 ft south of the project are residential uses, south of Bake Parkway and behind commercial, research, and industrial uses.





1. JAMF from business parking lot on Empire Drive to southwest.



3. JAMF from business parking lot on Hammond to north.



2. JAMF from Bake Parkway and South Pointe Drive.



4. JAMF looking north on Alton Parkway.

LSA

FIGURE 5-4 (Sheet 1 of 2)



5. JAMF looking northeast on Alton Parkway and Irvine Boulevard.



7. View to southwest from Alton, Borrego Wash in foreground.



6. From Alton Parkway street view looking northeast.



8. North edge of JAMF from west side of Alton.

LSA

FIGURE 5-4 (Sheet 2 of 2)

Musick Jail Expansion Views Around JAMF

5.10.2 EIR 564

EIR 564 evaluated aesthetic impacts from development of the jail expansion project, which at the time included agricultural buffer areas and building heights of a maximum of 45 ft. EIR 564 determined that with development of Pacific Commercentre (undeveloped in 1996), views of the jail buildings from nearby residences to the north will be virtually eliminated. Further, due to the distance to the closest residence to the north (over 1,200 ft north) and intervening topography and vegetation, the aesthetic effect of the jail would be very low, if visible at all. The closest residence to the south (approximately 700 ft) is at a lower elevation, and views to the JAMF site are obscured by intervening uses and landscaping. In addition, the project would not interfere with any scenic vista, and the 1996 Master Site Plan buildings would have appeared as typical institutional or industrial buildings within the area; thus, no aesthetic impacts would result from the project. Additional lighting needed for expansion of the jail would be similar to the existing lighting on site, would continue to be confined to the areas adjacent to buildings, and would not result in a significant impact. A conceptual rendering of the 1996 Master Plan site plan was included in EIR 585 and is shown in Figure 5-3. Figure 5-5 shows the simulated view from the intersection of Irvine Boulevard and Alton Parkway looking northeast.

Mitigation was included in Section 5.4 to provide for preparation of a landscape plan and construction of a block wall to provide visual buffering and to provide for an office-appearing facade on the exterior of the buildings. Mitigation was also included in Section 5.7 to ensure that new exterior lighting is confined to the areas around buildings. With implementation of these mitigation measures, impacts related to aesthetics and light and glare were reduced below a level of significance.

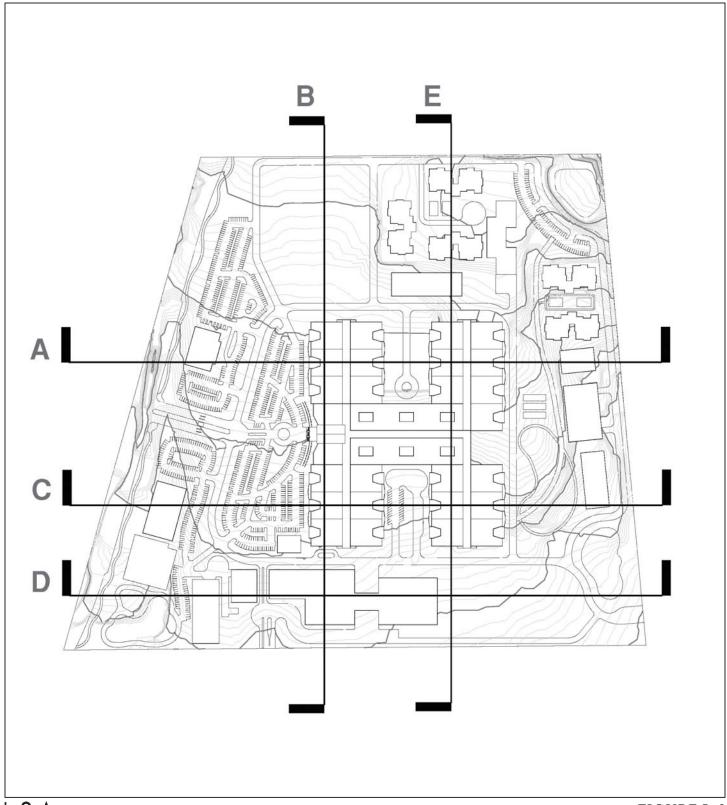
5.10.3 Analysis of Changes in Circumstances and Setting

The building heights for the JAMF Master Plan will not exceed 45 ft. Building layout was shown previously in Figure 3-9. As indicated in Chapter 3.0, parking lots have been changed to surface lots, and not structures, further reducing building massing on the site. The buildings have been shifted south from where the original complexes were located in the 1996 Master Site Plan. Figures 5-6 and 5-7 show the revised site sections for the proposed JAMF Master Plan. The relocation of these buildings allow for a lower profile because they would be on a lower part of the JAMF site. Views of the project area would be affected, as discussed below.

• North Views: The only sensitive receptors are the residential units located south of Bake Parkway in the City of Lake Forest. Currently, a 6 ft block wall surrounds the residential development, and all views northward from the residences are obstructed by the research and industrial development located south of Bake Parkway. A conceptual rendering of the Bake Parkway access is shown on Figure 5-8. In addition, due to the lower elevation of the residential community from the research and industrial uses located north of the residences, existing views of the JAMF Master Plan buildings are already obstructed. Therefore, these sensitive receptors would not experience any alteration in their viewshed. Impacts to northern views would be less than significant.

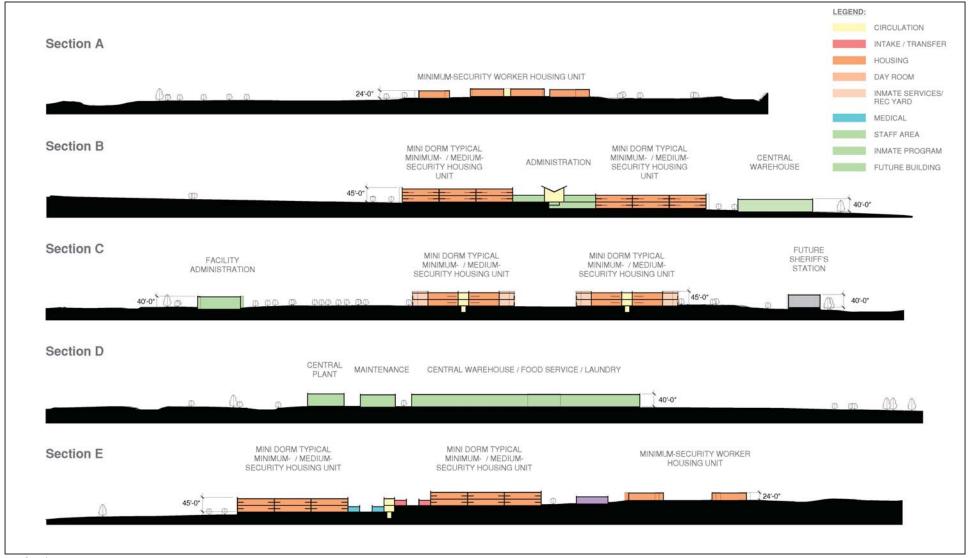


Musick Jail Expansion



Musick Jail Expansion

Site Section Key



Musick Jail Expansion

SOURCE: AECOM, 2012

Site Sections



 ${\it Musick Jail Expansion}$ Conceptual Rendering of Bake Parkway Entrance



 ${\it Musick Jail Expansion}$ Conceptual Rendering of Alton Parkway Entrance

• East Views: Views of the JAMF are currently partially obstructed by a chain-link fence with razor wire that extends along the property line of the JAMF. In addition, views of the JAMF Master Plan buildings would be further obstructed with their relocation farther south behind the existing research and industrial uses located east of Irvine Boulevard. Views farther east of the Santiago Hills and Santiago Peak would also be obstructed, as the JAMF and other existing buildings would be the predominant close-range views. Exhibit 3.8-5 from EIR 585, shown in Figure 5-3, provides a simulation of the eastward views with the JAMF developed according to the existing Master Plan. In addition, a conceptual rendering of the Alton Parkway access is shown on Figures 5-7. However, since only motorists along Irvine Boulevard and the business and industrial uses, which would not be considered sensitive visual receptors, would experience an impact in their viewshed, impacts for eastern views would be less than significant.

- **South Views:** Views of the JAMF would be obstructed along the southern side of the roadway by a chain-link fence with razor wire that would extend along the property line. There are no scenic vistas or viewsheds from southerly views, and no sensitive receptors would be impacted by the change in the viewshed. Therefore, impacts to southern views would be less than significant.
- West Views: The height of the JAMF Master Plan buildings could potentially range from one
 to four stories. However, the topography, vegetation, and business park located along
 Commercentre Drive would obstruct views further westward of JAMF from Towne Centre Drive
 and the surrounding uses. Therefore, less than significant impacts would occur to western views.

Great Park EIR, 2011 Supplemental EIR, and 2012 Draft Supplemental EIR. The Orange County Great Park Program EIR concludes that all potential impacts to aesthetics and visual resources would be mitigated to a less than significant level. Two mitigation measures address light and glare impacts from new development in the Great Park. The analysis in the 2011 Supplemental EIR is not relevant to the aesthetics or views from or to JAMF. The cumulative impacts were considered less than significant due to project-specific design review, application of mitigation measures, and the large amount of open space in the Great Park Plan. No changes to the aesthetics analysis or disposition of mitigation measures would occur as a result of the conclusion in the Great Park EIR.

Lake Forest Opportunities Study Program EIR and Supplemental EIR. The EIR concludes that the development under the new land use plan in the Lake Forest Opportunities Study would create a new source of substantial light or glare, which would adversely affect daytime or nighttime views in the area where the project would have outdoor illumination of more than 1.25 footcandles from dusk to dawn, where the project would use reflective building materials, or where the project would use neon or similar signage or architectural features. All other aesthetic impacts were less than significant. Aesthetics was not covered in the Supplemental EIR. No changes to the aesthetics analysis or disposition of mitigation measures would occur as a result of the conclusion in the Lake Forest Opportunities Study Program EIR.

Alton Parkway Extension EIR. EIR 585 concludes that with the application of the mitigation program related to lighting and grading, no significant aesthetic impacts would result from the project either individually or cumulatively. No changes to the aesthetics analysis or disposition of mitigation measures would occur as a result of the conclusions in EIR 585.

5.10.4 Mitigation Measures from EIR 564

In light of changes in circumstances and setting, EIR 564 was reviewed to determine whether or not changes to the project setting would affect the mitigation measures contained therein. Based on the analysis and information above, no changes to the mitigation measures found in EIR 564 are required. Mitigation measures related to aesthetics that would be applicable to the JAMF Master Plan are provided below. Minor changes to Mitigation Measure No. 33 have been added to reflect the new design of the JAMF. The purpose of the mitigation measure remains the same regarding obscuring views of the site from Alton Parkway.

- 31. Prior to the approval of construction bid documents for any permanent building at the Musick Jail, a landscape plan shall be prepared by a licensed landscape architect. While landscaping is to be installed in recognition of sound security practice, visual buffering shall be installed where not inconsistent with security practice.
- 32. All new incarceration buildings at the Musick Jail visible to the public off-site shall be constructed with the office-appearing façade similar in nature to the cells/administration building at the Theo Lacy Jail. Remaining buildings shall be designed in a compatible manner in keeping with the industrial park location of the jail site.
- 33. Prior or concurrent with the construction of the first complex, a 12-foot combination berm and fence will be constructed along Alton Parkway inside the perimeter landscaping. The design shall be reviewed by the Director, Planning and Development Services, and shall not interfere with the security of the facility.
- 33a. Perimeter signs for the jail shall be fully limited to simple identification and regulatory and directional signage, all in accordance with a comprehensive sign program to be developed and approved by Environmental Management Agency or its successor agency prior to the occupation of the first jail building.
- 41. Prior to the approval of construction bid documents for exterior electrical fixtures, the County Planning and Development Services Department shall ensure that lighting rays are confined to the areas surrounding buildings.

5.10.5 Findings Related to Aesthetics

No New Significant Effects Requiring Major EIR Revisions. Based on the foregoing analysis and information, there is no evidence that changes in circumstances or setting necessitate a major change to EIR 564. Changes in circumstances and setting will not result in new significant environmental

impacts to aesthetics, nor is there a substantial increase in the severity of impacts described in EIR 564.

No Substantial Change in Circumstances Requiring Major EIR Revisions. There is no information in the record or otherwise available that indicates that there are substantial changes in circumstances pertaining to aesthetics that would require major changes to EIR 564.

No New Information Showing Greater Significant Effects than EIR 564. This environmental analysis has analyzed all available relevant information to determine whether there is new information that was not available at the time EIR 564 was certified, indicating that a new significant effect not reported in that document may occur. Based on the information and analyses above, there is no substantial new information indicating that there will be a new significant impact to aesthetics requiring major revisions to EIR 564.

No New Information Showing Ability to Reduce Significant Effects in Previous EIR. There are no alternatives to the project or additional mitigation measures that would substantially reduce one or more significant impacts pertaining to aesthetics identified in and considered by EIR 564.

5.11 CULTURAL RESOURCES

EIR 564 considered potential project effects related to cultural resources as not being significant during preparation of the Initial Study (IS) Checklist and was not further addressed in EIR 564. The reason cited in the IS Checklist was that no cultural or paleontological resources had been identified on site. The Alton Parkway Extension Project EIR 585 provided a complete cultural resources environmental setting, which is incorporated herein by reference. The setting information and analyses from the Alton Parkway Extension Project EIR 585 are summarized below.

5.11.1 Existing Environmental Setting

Preparation of the Alton Parkway Extension Project EIR 585 included conducting a records and literature search and review of all historic and archaeological sites within a 0.5 mi radius of the project site, which includes the JAMF. The Alton Parkway Extension Project EIR 585 determined that no historic archaeological sites or isolates or historic properties have been recorded within a 0.5 mi radius of the project area.

5.11.2 EIR 564

In accordance with Section 15128 of the State CEQA Guidelines, EIR 564 considered potential project effects related to cultural resources to not be significant during preparation of the IS Checklist and the NOP, and they were not further addressed in EIR 564.

5.11.3 Analysis of Changes in Circumstances and Setting

There have not been substantive changes in circumstance or setting related to cultural resources since EIR 564 was certified. The jail expansion project would provide for the same jail facility expansion on the same site that was evaluated in EIR 564. The jail expansion project would not cause a substantial adverse change in the significance of any historical or archaeological resources, would not destroy unique paleontological resources, and would not disturb any human remains. Therefore, there are no changes in circumstances and setting that require any major changes to EIR 564, and no new significant environmental impacts related to cultural resources would occur.

Great Park EIR, 2011 Supplemental EIR, and 2012 Draft Supplemental EIR. The Orange County Great Park Program EIR concludes that all potential impacts to paleontological and cultural resources would be mitigated to a less than significant level. Standard observation mitigation measures to address the potential for unearthed resources during grading and excavation were applied. The discussion of cultural resources in the 2011 Supplemental EIR has no relevance to the JAMF Master Plan. The cumulative impacts were considered less than significant due to application of mitigation measures. No changes to the cultural resources analysis or disposition of mitigation measures would occur as a result of the conclusion in the Great Park EIR.

Lake Forest Opportunities Study Program EIR and Supplemental. The EIR concluded that due to the application of mitigation measures and standard conditions that would be imposed and enforced throughout build out of the converted land uses, the individual and cumulative contribution of the project to the destruction of subsurface cultural and paleontological resources throughout Lake Forest and the region would not be significant or cumulatively considerable. Cultural resources analyses were not included in the Supplemental EIR. Therefore, there are no changes in circumstances of cultural resources as analyzed in EIR 564.

Alton Parkway Extension EIR. EIR 585 concludes that with implementation of the mitigation program, potential impacts to paleontological and archaeological resources would be reduced to a level considered less than significant. In addition, when the impacts and the accompanying mitigation measures are taken into account with all the other projects in the area, cumulative impacts would also be less than significant. The conclusions in this EIR do not have any effect or bearing on the analysis related to cultural resources in EIR 564.

5.11.4 Mitigation Measures from EIR 564

In light of changes in circumstances and setting, EIR 564 was reviewed to determine whether changes to the project setting would affect the mitigation measures contained therein. Based on the analysis and information above, mitigation measures related to cultural resources were not required in EIR 564, and similarly, mitigation measures related to cultural resources are not required for the JAMF Master Plan project. However, the County has standard conditions that are applied to most projects involving grading and excavation. These standard conditions are enumerated below and added to the JAMF Master Plan. These standard conditions were referenced in the original NOP/IS for EIR 564.

SC-1

Prior to the initiation of any clearing, grubbing or grading activities, the Contractor shall provide written evidence to the Manager, Permit Services, that a County-certified archaeologist has been retained to observe grading activities and salvage, and catalogue archaeological resources as necessary. The archaeologist shall be present at the pre-grade conference, shall establish procedures for archaeological resource surveillance, and shall establish, in cooperation with the applicant, procedures for temporarily halting or redirecting work to permit the sampling, identification, and evaluation of the artifacts as appropriate. If the archaeological resources are found to be significant, the archaeological observer shall determine appropriate actions, in cooperation with the project applicant, for exploration and/or salvage.

Prior to the release of the grading bond the construction/contract manager shall obtain approval of the archaeologist's follow-up report from the Manager, Permit Services. The report shall include the period of inspection, an analysis of any artifacts found and the present repository of the artifacts. The archaeologist shall prepare excavated material to the point of identification. Applicant shall offer excavated finds for curatorial purposes to the County of Orange, or its designee, on a first refusal basis. These actions, as well as final mitigation and disposition of the resources, shall be subject to the approval of the Manager, Permit Services. The Orange County Sheriff's Department shall pay curatorial fees if an applicable fee program has been adopted by the Board of Supervisors, and such fee program is in effect at the time of presentation of the materials to the County of Orange or its designee, all in a manner meeting the approval of the Manager, Permit Services.

SC-2

Prior to the initiation of any excavation activities, the Contractor shall provide written evidence to the Manager, Permit Services, that Construction/Contract Manager has retained a County certified paleontologist to observe grading activities and salvage and catalogue fossils as necessary. The paleontologist shall be present at the pregrade conference, shall establish procedures for paleontological resource surveillance, and shall establish, in cooperation with the applicant, procedures for temporarily halting or redirecting work to permit sampling, identification, and evaluation of the fossils. If the paleontological resources are found to be significant, the paleontologist shall determine appropriate actions, in cooperation with the applicant, to ensure proper exploration and/or salvage.

Prior to the release of the grading bond the applicant shall submit the paleontologist's follow up report for approval by the Manager, Permit Services. The report shall include the period of inspection, a catalogue and analysis of the fossils found, and the present repository of the fossils. The Construction/Contract Manager shall or shall have prepared the excavated material to the point of identification, and offer excavated finds for curatorial purposes to the County of Orange, or its designee, on a first refusal basis. These actions, as well as final mitigation and disposition of the resources, shall be subject to approval by Manager, Permit Services. The Orange County Sheriff's Department shall pay curatorial fees if an applicable fee program has been adopted by the Board of Supervisors, and such fee program is in effect at

the time of presentation of the materials to the County of Orange or its designee, all in a manner meeting the approval of the Manager, Permit Services.

SC-3

In accordance with California Health and Safety Code, Section 7050.5, if human remains are found, no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County Coroner has determined the appropriate treatment and disposition of the human remains. The County Coroner shall make such determination within two working days of notification of discovery. The County Coroner shall be notified within 24 hours of the discovery. If the County Coroner determines that the remains are or believed to be Native American, the County Coroner shall notify the Native American Heritage Commission in Sacramento within 24 hours. In accordance with California Public Resources Code, Section 5097.98, the Native American Heritage Commission must immediately notify those persons it believes to be the most likely descended from the deceased Native American. The descendents shall complete their inspection within 24 hours of notification. The designated Native American representative would then determine, in consultation with the property owner, the disposition of the human remains.

5.11.5 Findings Related to Cultural Resources

No New Significant Effects Requiring Major EIR Revisions. Based on the foregoing analysis and information, there is no evidence that changes in circumstances or setting necessitate a major change to EIR 564. Changes in circumstances and setting will not result in new significant environmental impacts to cultural resources, nor is there a substantial increase in the severity of impacts described in EIR 564.

No Substantial Change in Circumstances Requiring Major EIR Revisions. There is no information in the record or otherwise available that indicates that there are substantial changes in circumstances pertaining to cultural resources that would require major changes to EIR 564.

No New Information Showing Greater Significant Effects than EIR 564. This environmental analysis has analyzed all available relevant information to determine whether there is new information that was not available at the time EIR 564 was certified, indicating that a new significant effect not reported in that document may occur. Based on the information and analyses above, there is no substantial new information indicating that there will be a new significant impact to cultural resources requiring major revisions to EIR 564.

No New Information Showing Ability to Reduce Significant Effects in Previous EIR. There are no alternatives to the project or additional mitigation measures that would substantially reduce one or more significant impacts pertaining to cultural resources identified in and considered by EIR 564.

5.12 RECREATION

5.12.1 Existing Environmental Setting

The JAMF site has several outdoor recreation resources on site for use by either inmates or staff. These include a softball field, an equestrian area, and a basketball court. The softball field is in the middle of the site, the basketball court is on the northern corner of the site, and the equestrian area is on the eastern side of the site, but horses are not kept on site. Recreation for inmates is regulated by Titles 15 and 24 of the California Code of Regulations and is provided for through operations and project design.

5.12.2 EIR 564

In accordance with Section 15128 of the State CEQA Guidelines, EIR 564 considered potential project effects related to recreation to not be significant during preparation of the IS Checklist, and they were not further addressed in EIR 564. The original NOP/IS prepared for EIR 564 states that the project would not result in any potentially significant impacts related to recreation because jail inmates do not leave the jail facilities, and recreation facilities would be available on the jail site; therefore, the proposed project would not increase demand for recreational facilities, affect existing recreational opportunities, or conflict with adopted recreational plans or policies. Hence, the original NOP/IS concludes that impacts to recreational facilities would not result from the 1996 Master Site Plan.

5.12.3 Analysis of Changes in Circumstances and Setting

There have not been substantive changes in circumstance or setting related to recreation at the JAMF site since EIR 564 was certified. The jail expansion project would provide for the same size and type of jail facility expansion that was evaluated in EIR 564. The jail expansion project does not include recreational facilities, require the construction or expansion of recreational facilities, or remove any existing recreational facilities. As in 1996, the current jail expansion project is not anticipated to influence existing or long-term growth in the area. The project would not result in increased usage or any physical deterioration to existing recreational facilities. Therefore, there are no changes in circumstances and setting that require any major changes to EIR 564, and no new significant environmental impacts related to recreation would occur.

Great Park EIR, 2011 Supplemental EIR, and 2012 Draft Supplemental EIR. The Great Park includes the expansion of recreation resources at a regional level. Impacts to recreation resources were considered in the EIR because recreation is a major component of the project. Therefore, the EIR and 2011 Supplemental EIR regarding the specific design of the park conclude that there would be no significant impacts to recreation resources. The provision of recreation resources is not relevant to the JAMF Master Plan because there is no relationship between jail planning and park planning. Therefore, the conclusions of the Great Park EIR and 2011 Supplemental EIR regarding recreation do not change the circumstances originally concluded in the original NOP/IS for EIR 564.

Lake Forest Opportunities Study Program EIR and Supplemental EIR. The EIR concludes that impacts from the land use changes to recreational resources would be less than significant at a project and cumulative level. The provision of recreation resources is not relevant to the JAMF Master Plan because there is no relationship between jail planning and park planning. The Supplemental EIR did not cover the topic of recreation. Therefore, the conclusions of the Lake Forest Opportunities Study Program EIR regarding recreation do not change the circumstances originally concluded in the original NOP/IS for EIR 564.

Alton Parkway Extension EIR. Impacts to recreation were identified as less than significant in the IS, and the analysis was not carried forward in the EIR.

5.12.4 Mitigation Measures from EIR 564

In light of changes in circumstances and setting, EIR 564 was reviewed to determine whether or not changes to the project setting would affect the mitigation measures contained therein. Based on the analysis and information above, mitigation measures related to recreation were not required in EIR 564, and similarly, mitigation measures related to recreation are not required for the current jail expansion project.

5.12.5 Findings Related to Recreation

No New Significant Effects Requiring Major EIR Revisions. Based on the foregoing analysis and information, there is no evidence that changes in circumstances or setting necessitate a major change to EIR 564. Changes in circumstances and setting will not result in new significant environmental impacts to recreation, nor is there a substantial increase in the severity of impacts described in EIR 564.

No Substantial Change in Circumstances Requiring Major EIR Revisions. There is no information in the record or otherwise available that indicates that there are substantial changes in circumstances pertaining to recreation that would require major changes to EIR 564.

No New Information Showing Greater Significant Effects than EIR 564. This environmental analysis has analyzed all available relevant information to determine whether there is new information that was not available at the time EIR 564 was certified, indicating that a new significant effect not reported in that document may occur. Based on the information and analyses above, there is no substantial new information indicating that there will be a new significant impact to recreation requiring major revisions to EIR 564.

No New Information Showing Ability to Reduce Significant Effects in Previous EIR. There are no alternatives to the project or additional mitigation measures that would substantially reduce one or more significant impacts pertaining to recreation identified in and considered by EIR 564.

5.13 MINERAL RESOURCES

5.13.1 Existing Environmental Setting

Based on the NOP for the Alton Parkway Extension, which is adjacent to the JAMF site, the project site is not identified as having significant existing and potential mineral resources by either the County of Orange General Plan Resources Element or the California Division of Mines and Geology (CDMG). Therefore, the JAMF site is not considered a resource or a suitable site for mineral resource extraction.

5.13.2 EIR 564

EIR 564 did not consider potential project effects related to mineral resources during preparation of the IS Checklist or the EIR because mineral resources were not included as an IS topic until well after completion of the IS and circulation of the NOP in 1996. Thus, mineral resources were not addressed in EIR 564.

5.13.3 Analysis of Changes in Circumstances and Setting

There have not been substantive changes in circumstance or setting related to mineral resources since EIR 564 was certified. As in 1996, the current design for the jail expansion project would not result in the loss of a known mineral resource or mineral resource recovery site. Therefore, there are no changes in circumstances or setting that would require any major changes to EIR 564, and no new significant environmental impacts related to mineral resources would occur.

Great Park EIR, 2011 Supplemental EIR, and 2012 Draft Supplemental EIR. The Orange County Great Park Program EIR did not analyze impacts to mineral resources because the topic was found to have no impacts in the IS in the NOP. The same was true in the 2011 Supplemental EIR. These findings have no effect on the circumstances of impacts to mineral resources for the JAMF Master Plan.

Lake Forest Opportunities Study Program EIR and Supplemental EIR. The EIR concludes that the land use changes would have no impact on mineral resources. Implementation of the project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State. Also, the project would not result in the loss of a locally important mineral resource recovery site delineated on a local General Plan, Specific Plan, or other Land Use Plan. The topic of mineral resources was not included in the Supplemental EIR. The project would not affect mineral resources on the JAMF site.

Alton Parkway Extension EIR. The NOP for the Alton Parkway Extension states that the project site is not identified as having significant existing and potential mineral resources by either the County of Orange General Plan Resources Element or the CDMG. No impacts were noted.

5.13.4 Mitigation Measures from EIR 564

In light of changes in circumstances and setting, EIR 564 was reviewed to determine whether or not changes to the project setting would affect the mitigation measures contained therein. Based on the analysis and information above, mitigation measures related to mineral resources were not required in EIR 564, and new mitigation measures related to mineral resources are not required for the JAMF Master Plan project since the site is not considered a resource for mineral resources.

5.13.5 Findings Related to Mineral Resources

No New Significant Effects Requiring Major EIR Revisions. Based on the foregoing analysis and information, there is no evidence that changes in circumstances or setting necessitate a major change to EIR 564. No new significant environmental impacts related to mineral resources have been identified.

No Substantial Change in Circumstances Requiring Major EIR Revisions. There is no information in the record or otherwise available that indicates that there are substantial changes in circumstances pertaining to mineral resources that would require major changes to EIR 564. No new significant environmental impacts related to mineral resources have been identified.

No New Information Showing Greater Significant Effects than EIR 564. This environmental analysis has analyzed all available relevant information to determine whether there is new information that was not available at the time EIR 564 was certified, indicating that a new significant effect not reported in that document may occur. Based on the information and analyses above, there is no substantial new information indicating that there will be a new significant impact to mineral resources because none exist on site.

No New Information Showing Ability to Reduce Significant Effects in Previous EIR. There are no alternatives to the project or additional mitigation measures that would substantially reduce one or more significant impacts pertaining to mineral resources identified in and considered by EIR because there are no mineral resources on site.

5.14 HAZARDOUS WASTE/MATERIALS

EIR 564 provided a complete hazardous materials environmental setting in Section 5.14, which is incorporated herein by reference. The setting information and analyses from EIR 564 are summarized below and focused on any changes to this topic since EIR 564. Additionally, the Alton Parkway Extension Project EIR 585 (Alton Parkway 2006 EIR) is also helpful in providing existing setting and in analyzing potential hazardous materials impacts related to the JAMF Master Plan; it is also included in the summarization and analysis below, and is herein incorporated by reference.

5.14.1 Existing Environmental Setting

As discussed in EIR 564, there are no sites on the lists compiled pursuant to Section 65962.5 of the Government Code for hazardous materials within 1 mi of the project site. However, the former MCAS El Toro and the on-site jail facility have had uses or operations that could potentially have leaked a hazardous material into the environment or could result in a potential hazard to health and human safety. The former MCAS El Toro is adjacent to the west of the project site. MCAS El Toro was commissioned in 1942 as a Marine Corps pilot fleet operation training facility and was closed in July 1999.

One landfill associated with the former MCAS El Toro is located in proximity to the project site, approximately 800 ft north of the JAMF site property line. The Orange County Great Park Program EIR (May 2003) identified the landfill as "Installation Restoration Program (IRP) Site 2." IRP Site 2 (Magazine Road Landfill) operated between 1950 and 1980. It is believed to contain inert solid waste, municipal solid waste, unspecified industrial wastes, lead batteries, transformers, household refuse, hydraulic fluid, unspecified waste fuels, crankcase oil, lead-based paint residues, and scrap metal. Soil contamination has been identified in the immediate vicinity of the landfill and within surficial soils of the Borrego Canyon Wash, and VOCs were detected in groundwater samples collected south/southeast (i.e., downgradient) of the landfill. It is estimated that groundwater within this area ranges from approximately 20 ft to more than 50 ft below grade. In addition, a separate abandoned landfill/trash pit (identified as Landfill D-1) was also identified on the MCAS El Toro site in the vicinity of the Magazine Road Landfill.

A Preliminary Phase I Environmental Site Assessment was prepared for the JAMF in July 1996 and was included in FEIR No. 564. The Environmental Assessment identified a number of potential environmental concerns associated with JAMF site, including transformers installed prior to 1978, which may contain polychlorinated biphenyls (PCBs); soils containing agricultural pesticides; buildings potentially containing asbestos-containing materials (ACMs); an underground storage tank; 55-gallon drums and an oil pump; and the storage and use of solvents on site.

The project site is not within an area designated as a Special Fire Protected Area (SFPA). An SFPA is an area where structures and other human development meet or intermingle with wildland or vegetative fuels and/or that contain the type and condition of vegetation, topography, weather, structure density, and other relevant factors that potentially increase the possibility of fire hazards. Likewise, the project site is not identified in the County of Orange, City of Irvine, or City of Lake Forest General Plans as being in a high-fire-hazard area.

5.14.2 EIR 564

A large portion of the project site was being used for agricultural production, and there is the potential for exposure to agricultural chemicals such as pesticides. EIR 564 provided that testing of the soils for the presence of pesticides would occur prior to construction in areas where the concern for agricultural contamination was identified. However, the use of agricultural chemicals at the JAMF site has been accomplished in accordance with applicable regulations, and it is not expected that the chemicals have been applied in such a concentration that they would pose an environmental risk. In addition, EIR 564 requires testing for the presence of asbestos in the older buildings on site that would be demolished and the assessment of potential risks related to on-site transformers. Potential

impacts related to the hazardous materials were considered less than significant. However, a mitigation measure was included to ensure that impacts remained less than significant.

5.14.3 Analysis of Changes in Circumstances and Setting

There is a possibility that grading and construction activities would disperse residual chemicals deposited in the soil during agricultural production activities on-site. Studies cited in EIR 564 indicated that the amount of such chemicals is not anticipated to be substantial and with mitigation would not result in a significant environmental impact.

The proposed jail expansion would not involve the use, storage, or generation of hazardous materials. The use, transport, storage, and disposal of such chemicals are strictly regulated by federal, State, and local laws and regulations. The site is not located near a fire hazard area, nor would it interfere with an emergency response plan. With implementation of the mitigation measure, project impacts related to hazardous waste/materials are reduced below a level of significance.

Great Park EIR, 2011 Supplemental EIR, and 2012 Draft Supplemental EIR.

Hazardous Materials. The Great Park EIR concludes that there will be less than significant impacts related to public health and safety due to the implementation of the IRP for the cleanup of the former MCAS El Toro site by the Department of the Navy. In addition, mitigation measures to address hazardous materials on the property beyond the IRP were incorporated in the EIR and later expanded in Addendum No. 4 and the 2011 Supplemental EIR. According to the EIR, the IRP and mitigation measures reduce impacts to less than significant levels both at a project level and a cumulative level. Because the Great Park site was a military installation, it has special hazardous materials issues that are unique to the site. These issues have little bearing on the localized and typical hazardous materials issues associated with the JAMF. Therefore, the findings in the EIR, Addendum No. 4, and the 2011 Supplemental EIR do not change the conclusions or mitigation measures of EIR 564 relating to hazardous materials.

Wildland Fires. According to the EIR, wildland fires posed a potentially significant impact due to the proximity of large natural open space areas adjacent to developed areas. A mitigation measure to have the Orange County Fire Authority (OCFA) review all plans to ensure the implementation of fuel modification zones was included. This mitigation measure reduced the risk to a less than significant level. The modifications to the development in PA 51 along with new design features added to the project allowed the fire risks to be addressed, and they are no longer considered to be significant, as noted in the 2011 Supplemental EIR. In addition, the wildland fire risk at the Great Park is slightly different than at JAMF because JAMF is surrounded on two sides by developed area. The construction of Alton Parkway provides a fire break. The fire risk at the existing facility would be higher than that proposed in either the 1996 Master Site Plan or the JAMF Master Plan since structures would be more centrally located and would be equipped with modern fire prevention apparatus in the design. Therefore, the conclusions in this EIR do not change the analysis or mitigation proposed in EIR 564.

Lake Forest Opportunities Study Program EIR and Supplemental EIR. The EIR concludes that all impacts are less than significant or less than significant with the statutory requirements applied. The topic was not included in the Supplemental EIR.

Alton Parkway Extension EIR. With implementation of the identified mitigation program, project impacts related to hazards associated with the alignment between Irvine Boulevard and Commercentre Drive would be less than significant. In addition, construction of Alton Parkway will provide a physical break between the Central Coastal NCCP Reserve and the JAMF structures, which will lessen potential wildland fire risks.

5.14.4 Mitigation Measure from EIR 564

In light of changes in circumstances and setting, EIR 564 was reviewed to determine whether or not changes to the project setting would affect the mitigation measures contained therein. Based on the analysis and information above, no changes to the mitigation measure found in EIR 564 are required. The mitigation measure related to hazardous waste/materials that would be applicable to the proposed JAMF Master Plan is provided below.

52. Prior to the construction of any buildings on the JAMF site, a further environmental site assessment shall be conducted to confirm the absence of agricultural chemicals in significant amounts, the absence of asbestos in buildings, and the absence of any environmental risks from transformers.

5.14.5 Findings Related to Hazardous Waste/Materials

No New Significant Effects Requiring Major EIR Revisions. Based on the foregoing analysis and information, there is no evidence that changes in circumstances or setting necessitate a major change to EIR 564. Changes in circumstances and setting will not result in new significant environmental impacts related to hazardous waste/materials, nor is there a substantial increase in the severity of impacts described in EIR 564.

No Substantial Change in Circumstances Requiring Major EIR Revisions. There is no information in the record or otherwise available that indicates that there are substantial changes in circumstances pertaining to hazardous waste/materials that would require major changes to EIR 564.

No New Information Showing Greater Significant Effects than EIR 564. This environmental analysis has analyzed all available relevant information to determine whether there is new information that was not available at the time EIR 564 was certified, indicating that a new significant effect not reported in that document may occur. Based on the information and analyses above, there is no substantial new information indicating that there will be a new significant impact related to hazardous waste/materials requiring major revisions to EIR 564.

No New Information Showing Ability to Reduce Significant Effects in Previous EIR. There are no alternatives to the project or additional mitigation measures that would substantially reduce one or more significant impacts pertaining to hazardous waste/materials identified and considered in EIR 564.

5.15 PUBLIC SERVICES AND UTILITIES

5.15.1 Existing Environmental Setting

Section 5.11 of EIR 564 includes the existing environmental setting for public services and utilities. In addition, the planning and design of the Alton Parkway Extension includes the incorporation of utilities within the street right-of-way. The area around the JAMF site includes standard utilities associated with the business park developments on the south and east side of the site. On-site utilities have been upgraded in an as-needed fashion, but have not been substantially upgraded due to the anticipated Master Plan implementation. The site has adequate public service provision for the few public services needed for the current operation of the jail. The existing conditions for public services are as follows:

Law Enforcement. The JAMF site is located in the City of Irvine's Portola¹ service area for police services provided by the Irvine Police Department. While most law enforcement on the JAMF site is provided by the Orange County Sheriff's Department, general law enforcement and emergency situations would be handled by the Irvine Police Department.

Fire Protection. The OCFA provides fire and emergency paramedic service to the JAMF. According to OCFA's Service Area map, the JAMF site is in the Division 5, Battalion 5 Service Area. The closest stations are 19, 38, 51, and 54. Stations 19 and 38 are located close enough to the JAMF site to respond within an adequate urban response time of 6 minutes.

Water and Wastewater. The JAMF is located within the Irvine Ranch Water District (IRWD) water service area. IRWD provides both domestic potable water and untreated nonpotable water (for agriculture) to the site. These systems are described below.²

Potable Water System. Currently, approximately 50 percent of the IRWD potable water supply comes from imported water deliveries purchased from the Metropolitan Water District of Southern California (MWD). The balance of the IRWD potable supplies come from locally-developed groundwater, primarily the Dyer Road Well Field (DRWF) and the Deep Aquifer Treatment System (DATS), both located in the City of Santa Ana. Other groundwater sources include the Irvine Subbasin wells and the Irvine Desalter. The DRWF produces groundwater from the principal aquifer of the Orange County Groundwater Basin (Basin), and the DATS wells produce groundwater from a deeper aquifer generally assumed to be below the principle aquifer.

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Source: http://www.cityofirvine.org/ipd/geo/default.asp, accessed April 17, 2009.

Excerpted from the Lake Forest Opportunities Study Program EIR, 2006.

The Basin is managed by the Orange County Water District (OCWD). Under agreement with OCWD and the City of Santa Ana, IRWD has an annual production limit of 28,000 acre-feet per year (afy) in the DRWF and 8,000 afy from the DATS Wells. Currently, 18 wells with a capacity of 5 cubic feet per second (cfs) per well are operational. The groundwater produced from these systems is conveyed to the IRWD distribution system via a 54-inch diameter transmission main located in Dyer Road in the City of Irvine. Based on usage reports from 2011, JAMF uses 54,577 million gallons per year.

Nonpotable Water System. The existing nonpotable water system is supplied by four primary sources: reclaimed water produced at the Michelson Water Reclamation Plant (MWRP) and Los Alisos Water Reclamation Plant (LAWRP), native water collected and stored at Irvine Lake, untreated water purchased from MWD, and groundwater from the Irvine Sub-Basin and the Irvine Desalter. The nonpotable water system delivers reclaimed water, supplemental untreated water, and limited nonpotable groundwater to landscape, agricultural irrigation customers, high rise office buildings for nonpotable water usage (toilets), and various industrial users. Irvine Lake provides storage and captures local runoff for the untreated water system and delivered through the Irvine Lake Pipeline; Sand Canyon and Rattlesnake reservoirs provide storage for reclaimed water within the system.

Gas and Electricity. Natural gas service to the JAMF site is provided by the Southern California Gas Company (SCG). Electricity is provided by Southern California Edison (SCE). Based on usage reports on electricity from 2011, JAMF uses 2.9 million kilowatt hours (kwh) per year.

Solid Waste. Based on 2011 usage reports on solid waste, 500 tons of solid waste is exported from the JAMF site and hauled to one of the County's three sanitary landfills (Olinda Alpha, Frank R. Bowerman, or Prima Deshecha).

5.15.2 EIR 564

EIR 564 evaluated potential public services and utilities impacts with regard to law enforcement, fire protection, schools, electricity, natural gas, water, wastewater, public transportation, healthcare, and correctional medical services.

Law Enforcement. EIR 564 provided that additional systemwide staffing of Sheriff's Department personnel will be required as a result of the project. The Sheriff's Department anticipated that 1,066 additional facility personnel would be required to staff the new facilities in EIR 564. In addition, the project would result in an increase in vehicle trips associated with operations of the jail. This may also result in staffing needs in the adjacent Cities of Lake Forest and Irvine. The potential increases in staffing for adjacent cities was determined to be less than significant

Fire Protection. The OCFA has indicated that the proposed project will increase the demand for fire protection services and emergency medical services. However, these increases were determined to be less than significant.

Water Service. The IRWD indicated in 1996 that domestic water facilities were adequate to serve the project, and anticipated impacts related to water facilities and services were less than significant.

Wastewater. A special wastewater study was prepared for EIR 564 and was included as Appendix K in the EIR appendices. The evaluation estimated an average wastewater generation rate of 85 gallons per capita per day (gpcd). Based on the number of inmates and a duty factor of 85 gpcd, the average, maximum, and peak-hour demands were estimated. At a population of 7,584 inmates, the average demand would be 0.99 cfs, with a peak-hour demand of 1.89 cfs. The evaluation concluded that the existing IRWD wastewater collection system is adequate to accommodate flows generated by the project for up to 3,840 inmates prior to 2000. EIR 564 also noted that the wastewater agreement between the County and IRWD will need to be amended or replaced by a new agreement to reflect the expansion of the site. EIR 564 concluded that the wastewater system, including the then-planned improvements, would be adequate to serve the anticipated flows from the proposed project with the planned sewer system improvements that would occur irrespective of the jail expansion. Notwithstanding that conclusion, the findings associated with EIR 564 acknowledged the need for coordination with IRWD regarding sewer capacity, in particular, for an additional 2,850 inmates (over and above the existing 1,256). Therefore, Mitigation Measure No. 51a was added to the project as part of the final approvals.

Schools. EIR 564 concluded that the proposed project is not anticipated to result in any capacity impacts to schools.

Similarly, the proposed project would not result in significant impacts to the following utilities and services: electricity, natural gas, telephone, and healthcare. Mitigation was included in EIR 564 requiring coordination with service providers prior to construction. Mitigation measures in EIR 564 are provided below. After implementation of mitigation measures, the significant impacts of the project were reduced below a level of significance.

5.15.3 Analysis of Changes in Circumstances and Setting

Great Park EIR, 2011 Supplemental EIR, and 2012 Draft Supplemental EIR. The Great Park EIR concluded that there would no significant impacts in all categories of utilities and services systems on either a project level and a cumulative level. The 2011 Supplemental EIR also concluded the same. For police and fire services, the EIR included mitigation that made impacts less than significant. The 2011 Supplemental EIR found no change in that status. While the EIR makes a point of the JAMF site being outside the scope of the Great Park Plan and in a separate jurisdiction, it acknowledges that EIR 564 found that there would be no significant impacts to public services, utilities, or service systems with the implementation of the identified mitigation measures.

Lake Forest Opportunities Study Program EIR and Supplemental EIR. The EIR concludes that all impacts to public services and utilities are less than significant and current and future demands can be met for all public services applicable to the JAMF site, including: water, wastewater, natural gas, and electricity. The subject parcels had already been entitled. Therefore, services and utilities would already have been planned for them. The project changed the types of planned land uses, and those changes did not result in any significant impacts to public services and utilities. The Supplemental EIR did not analyze public services or utilities.

Alton Parkway Extension EIR. The EIR concludes that the project would have less than significant impacts to utilities and public services. The extension of the roadway enhances the conveyance of utilities in the area, and because it also facilitates movement in the project area, it improves the provision of emergency services in the area.

5.15.4 Mitigation Measures from EIR 564

In light of changes in circumstances and setting, EIR 564 was reviewed to determine whether or not changes to the project setting would affect the mitigation measures contained therein. Based on the analysis and information above, no changes to the mitigation measures found in EIR 564 are required. In addition, recent case law suggests that public service provision may not fall within the realm of CEQA analysis due to the presumed obligations of public service providers. None the less, mitigation measures related to public services and utilities that would be applicable to the JAMF Master Plan are provided below.

- 51. Prior to commencement of any construction activities, the County of Orange shall coordinate with the Southern California Edison, Southern California Gas, Pacific Bell (or current provider), Irvine Ranch Water District, and Orange County Fire Authority regarding any construction activities to ensure existing facilities are protected and any necessary expansion or relocation is planned and scheduled in consultation with the appropriate public agencies.
- 51a. Prior to the commencement of construction of any jail building, the "Agreement for Acquisition of Potable Water Service from Irvine Ranch Water District for James A. Musick Facility" must be amended or replaced. This agreement allows for capacity in IRWD facilities to enable delivery of 0.27 cubic feet per second (cfs) of domestic water. The expansion and increased demand will require the agreement either be amended or replaced by a new agreement to reflect the expansion of the site, including project phasing and the payment of appropriate "fair share" capacity charges. As the project becomes clarified in terms of expansion plans, contact IRWD so that the appropriate service agreement can be drafted. Plans will be submitted to the development services section of IRWD for review and approval as soon as they become available.

See City of Hayward v. Board of Trustees of the California State University (2012) 207 Cal.App.4th 446, 453-460.

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51b. At the time of the review of the "Agreement for Acquisition of Potable Water Service," each water use will be evaluated and IRWD will determine whether it will furnish potable or nonpotable water for the designated purpose.

51c. Prior to the commencement of jail construction exceeding 2,850 inmates or that equivalent, an amendment of the "Agreement for Acquisition of Interim and Permanent Sewer Service" for the Musick facility shall be negotiated with IRWD, and shall outline the costs for the use of existing sewers, potential future sewer improvements, and treatment and disposal capacity.

5.15.5 Findings Related to Public Services and Utilities

No New Significant Effects Requiring Major EIR Revisions. Based on the foregoing analysis and information, there is no evidence that changes in circumstances or setting necessitate a major change to EIR 564. Changes in circumstances and setting will not result in new significant environmental impacts to public services and utilities, nor is there a substantial increase in the severity of impacts described in EIR 564.

No Substantial Change in Circumstances Requiring Major EIR Revisions. There has essentially been no change to the previously approved expansion plans with regard to the number of beds proposed for the project and the circumstances relating to the setting for public services has not changed. There is no information in the record or otherwise available that indicates that there are substantial changes in circumstances pertaining to public services and utilities that would require major changes to EIR 564.

No New Information Showing Greater Significant Effects than EIR 564. This environmental analysis has analyzed all available relevant information to determine whether there is new information that was not available at the time EIR 564 was certified, indicating that a new significant effect not reported in that document may occur. Based on the information and analyses above, there is no substantial new information indicating that there will be a new significant impact to public services and utilities requiring major revisions to EIR 564.

No New Information Showing Ability to Reduce Significant Effects in Previous EIR. There are no alternatives to the project or additional mitigation measures that would substantially reduce one or more significant impacts pertaining to public services and utilities identified in and considered by EIR 564.

5.16 CONSTRUCTION ACTIVITIES

5.16.1 Existing Environmental Setting

The JAMF site is located at 13502 Musick Road in central Orange County, within a 94-acre unincorporated area abutting the Cities of Lake Forest and Irvine. The project site is south and east of the City of Irvine and south and west of the City of Lake Forest. The only construction activities in

the project area are those scheduled to occur on the Shea-Baker property in the City of Lake Forest. The Alton Parkway extension is complete. Access to the project site is from Musick Road on the southeast side of the site. The main access will be taken from Alton Parkway after the entryway is constructed. Refer to Section 3.1 earlier in this document for a full description of the existing environmental setting.

5.16.2 EIR 564

Section 5.13 of EIR 564 includes the existing environmental setting for construction activities. Construction activities necessary for JAMF Master Plan implementation include vegetation clearing, demolition, excavation, grading, drainage system construction, structure construction, parking lot and internal roadway construction, and completion of infrastructure improvements. Construction impacts that result from such activities include increases in truck activity, fugitive dust (PM₁₀) and combustion emissions, noise, soil erosion, and view disruption. Traffic detours and delays may also occur during construction periods. Mitigation measures were included in EIR 564 to reduce these potential impacts. After implementation of the mitigation measures, potential project impacts related to construction activities were reduced to below a level of significance.

5.16.3 Analysis of Changes in Circumstances and Setting

Grading required for project implementation is expected to be minimal, as most of the grading necessary for roadway construction has already occurred. As stated in EIR 564, construction impacts that result from construction and grading activities include increases in truck activity, fugitive dust (PM₁₀) and combustion emissions, noise, soil erosion, increased fire potential, and view disruption. The project would be required to comply with SCAQMD Rules 402 and 403. Rule 403 requires that fugitive dust be controlled with best available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. In addition, SCAQMD Rule 402 requires the implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off site. Applicable dust suppression techniques from Rule 403 were enumerated earlier in Section 5.8 in Mitigation Measures 2 through 17 (excluding 3 and 14). Implementation of those dust suppression techniques can reduce fugitive dust generation (and thus the PM₁₀ component). Compliance with these rules would reduce impacts on nearby sensitive receptors. Mitigation included in EIR 564 requires compliance with SCAQMD rules for dust suppression, implementation of erosion control measures, and compliance with NPDES permits.

5.16.4 Mitigation Measures from EIR 564

In light of changes in circumstances and setting, EIR 564 was reviewed to determine whether changes to the project setting would affect the mitigation measures contained therein. Based on the analysis and information above, minor changes to the mitigation measures found in EIR 564 are required. Mitigation measures related to construction activities that would be applicable to the JAMF Master Plan are provided below. Note that the responsible party has shifted to OCSD.

18. At the time that project grading and construction jobs are bid, the Director of Public Works Orange County Sheriff's Department Research and Development Director or

- designee shall ensure that project specifications require contractors to configure construction parking to minimize traffic interference.
- 19. At the time that project grading and construction jobs are bid, the Director of Public Works-Orange County Sheriff's Department Research and Development Director or designee shall ensure that project specifications require contractors to minimize obstruction of through-traffic lanes.
- 20. At the time that project grading and construction jobs are bid, the Director of Public Works-Orange County Sheriff's Department Research and Development Director or designee shall ensure that project specifications require contractors to provide a flagperson to properly guide traffic and ensure safety at construction sites.
- 21. At the time that project grading and construction jobs are bid, the Director of Public Works Orange County Sheriff's Department Research and Development Director or designee shall ensure that project specifications require contractors to schedule operations affecting traffic for off-peak hours, where feasible.
- 22. At the time that project grading and construction jobs are bid, the Director of Public Works Orange County Sheriff's Department Research and Development Director or designee shall ensure that project specifications require contractors to develop a traffic plan to minimize traffic flow interference from construction activities (the plan may include advance public notice of routing, use of public transportation and satellite parking areas with a shuttle service).

Because Alton Parkway is the only adjacent arterial and it has already been constructed, language pertaining to its design with regard to bike lanes has been stricken from mitigation measure 23.

23. At the time that final construction plans are developed, the Director of Public Works Orange County Sheriff's Department Research and Development Director or designee shall ensure that project specifications require bicycle lanes are provided on adjacent arterial highways; and that bicycle storage areas, bicycle amenities, and efficient parking management techniques are incorporated in the plans.

The following mitigation measures have already taken place as part of the design for Alton Parkway.

- 24. At the time that final construction plans are developed, the Director of Public Works shall ensure that project specifications provide dedicated turn lanes as appropriate.
- 29. At the time that final construction plans for the Alton Parkway signalized entrance are prepared, the Director of Public Works shall ensure that project specifications require that bus-turn aprons are located on each side of Alton Parkway and bus-shelters are provided. The County of Orange will cooperate with OCTA in designing bus shelters for the jail which match as much as possible the bus shelters in Irvine Spectrum. These efforts shall take place prior to the occupation of the first jail building, and will be supervised by Environmental Management Agency or its successor agency.

26. At the time that final construction plans are developed, the Director of Public Works shall ensure that project specifications require contractors to install energy efficient street lighting.

49. Prior to or concurrent with the opening of the Alton Parkway entrance to employee and visitor access, the Director of Public Works shall ensure that the project specifications require that contractors install bus aprons on the northerly and southerly sides of Alton Parkway in a manner meeting the requirements of the OCTA, and a sidewalk is constructed along the southerly side of Alton Parkway from Irvine Boulevard to the project entrance on Alton Parkway, and along the project entry drive to the visitor entrance.

The following mitigation measure has been replaced by Mitigation Measure GCC-1 in Section 4.3 and LEED design specifications already incorporated into the project, as described in Section 4.3.

27. At the time that final construction plans are developed, the Director of Public Works shall ensure that project specifications require contractors to introduce window glazing, wall insulation, and efficient ventilation.

The following mitigation measures were incorporated into the project as part of the Regulation XV ridesharing mandate of 1990. Ridesharing was made voluntary in late 1995, funding incentives and enforcement were stricken, and Regulation XV ostensibly became defunct. Therefore, the following mitigation measures are no longer required for regulatory compliance.

- 25. At the time of occupancy of the first inmate housing complex, the Sheriff's Department shall establish a Transportation Management Association (TMA) or participate in the Spectrum TMA, to create incentives for employees to rideshare.
- 28. At the time any off-street parking lot or garage is opened for use, the Sheriff's Department shall ensure that preferential parking spaces are provided to high occupancy vehicles.

5.16.5 Findings Related to Construction Activities

No New Significant Effects Requiring Major EIR Revisions. Based on the foregoing analysis and information, there is no evidence that changes in circumstances or setting necessitate a major change to EIR 564. Changes in circumstances and setting will not result in new significant environmental impacts related to construction activities, nor is there a substantial increase in the severity of impacts described in EIR 564.

No Substantial Change in Circumstances Requiring Major EIR Revisions. There is no information in the record or otherwise available that indicates that there are substantial changes in circumstances pertaining to construction activities that would require major changes to EIR 564.

No New Information Showing Greater Significant Effects than EIR 564. This environmental analysis has analyzed all available relevant information to determine whether there is new information that was not available at the time EIR 564 was certified, indicating that a new significant effect not reported in that document may occur. Based on the information and analyses above, there is no substantial new information indicating that there will be a new significant impact related to construction activities requiring major revisions to EIR 564.

No New Information Showing Ability to Reduce Significant Effects in Previous EIR. There are no alternatives to the project or additional mitigation measures that would substantially reduce one or more significant impacts pertaining to construction activities identified in and considered in EIR 564.

5.17 CUMULATIVE IMPACTS

EIR 564 analyzed cumulative impacts both in the individual environmental chapters and a summary chapter regarding the regional context for cumulative impacts. This analysis reviews updated information in the context of the analysis and conclusions of EIR 564. EIR 564 concluded that the 1996 Master Site Plan would not have any significant cumulative impacts. As previously discussed, EIR 564 took into account the then-proposed airport and not the Great Park in its cumulative analysis.

5.17.1 Definition of Cumulative Impacts

Section 15355 of the CEQA Guidelines defines cumulative impacts as:

...Cumulative impacts' refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts...

Section 15355 further describes potential cumulative impacts as:

- ...(a) The individual effects may be changes resulting from a single project or a number of separate projects.
- (b) The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

Cumulative impacts refer to two or more individual impacts that, when considered together, are considerable or that compound or increase other impacts. The individual effects may be changes resulting from a single project or a number of projects. A cumulative impact refers to the degree of change in the environment resulting from a particular project plus the incremental impacts created by other closely related past, present, and reasonably foreseeable future projects. Cumulative impacts may reveal that relatively minor impacts associated with a particular project may contribute to more

significant impacts when considered collectively with other projects taking place over a period of time.

5.17.2 Methodology and Approach to Analysis

The cumulative impacts analysis requires consideration of other projects in an area, in conjunction with the proposed project, to assess the potential for significant adverse cumulative impacts. For this EIR, the potential environmental effects of the proposed project were considered in conjunction with the potential environmental effects of build out of other projects approved in the area as well as build out of relevant General Plans. Much of this analysis has recently been conducted in EIRs near the JAMF site. The cumulative analyses from the Great Park Program EIR, the Lake Forest Opportunities Study Program EIR, and the Alton Parkway EIR are used to augment and update the cumulative analysis for the JAMF Master Plan. These cumulative analyses are incorporated by reference and included in Appendix E of this environmental analysis.

5.17.3 Existing Environmental Setting

As previously discussed, the JAMF site has remained largely unchanged since the analysis in EIR 564 in 1996. As discussed in Chapter 3 of this Supplemental EIR, the general project characteristics are vastly similar to those proposed in the 1996 Master Site Plan. The environmental setting for the cumulative analysis would be the area in the vicinity of the JAMF site, primarily the Cities of Irvine and Lake Forest.

5.17.4 Analysis of Changes in Circumstances and Setting

Below is a summary of the cumulative impacts findings in each of the EIRs considered relevant in this analysis.

Orange County Great Park Program EIR, 2011 Supplemental EIR, and 2012 Draft Supplemental EIR.

Cumulatively Significant Impacts

- 2015, 2030, and post-2030 Traffic at seven intersections
- Short-term Air Quality
- Operational Air Quality
- Agricultural Resources
- Jobs/Housing Impacts

Cumulatively Less Than or Not Significant

Land Use

- Geology and Seismicity
- Hydrology and Water Quality
- Biological Resources
- Paleontological Resources
- Cultural Resources
- Aesthetics
- Population and Housing
- Public Services and Facilities
- Utilities

Lake Forest Opportunities Study Program EIR and Supplemental EIR.

Cumulatively Significant Impacts

- Light and Glare
- Agricultural Resources
- Short-term Air Quality
- Operational Air Quality
- Water Quality Pesticides only
- Future Traffic Noise
- Population Growth
- 2030 Traffic
- Greenhouse Gas Contribution

Cumulatively Less Than or Not Significant

- Aesthetics
- CO Hot Spots
- Odors
- Biological Resources
- Cultural Resources
- Geology, Soils, and Mineral Resources
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning

- Construction Noise
- Housing
- Public Services
- Utilities and Service Systems

Alton Parkway Extension EIR.

Cumulatively Significant Impacts

- Aesthetics
- Agricultural Resources
- Short-term Air Quality

Cumulatively Less Than or Not Significant

- Biological Resources
- Cultural Resources
- Geophysical
- Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Public Services and Utilities
- Traffic

Based on the lists above, the most conservative interpretation of cumulative impacts is the Lake Forest Opportunities Study Program EIR. Section 1.10 of the Lake Forest Opportunities Study Program EIR (included in Appendix F of this environmental analysis and incorporated by reference)¹ includes a comprehensive cumulative projects listing. These projects would also be relevant to the background of the JAMF site and project. This cumulative project area includes projects throughout south Orange County.

However, the proposed JAMF Master Plan does not involve a substantial change in land use entitlements; rather, it only updates the previous approved 1996 Master Site Plan. Therefore, many of the cumulatively considerable impacts associated with land development would not be associated with the development of a public facility such as a jail. For example, the future traffic associated with the JAMF Master Plan would be linked to the future employment levels associated with the jail

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It is noted that this analysis did not include the build out of the 1996 Master Site Plan. However, EIR 564 concluded that the proposed JAMF Master Plan build out would not have any cumulative impacts and this conclusion was upheld in the Court of Appeal.

operations and the other facilities on site. While not absolute, this is a tangible and predictable number at build out without a range of outcomes or secondary impacts. In addition, since 1996, the scope of the development of the JAMF Master Plan is specifically designed for Phase 1 and conceptually designed through build out, so the uncertainties noted in the Lake Forest Program EIR are generally known in the JAMF Master Plan. It should be noted that final design for Phase 1 will be completed at a later date after the approval of the Revised Master Plan.

Light and Glare. The City of Lake Forest assumed a cumulative impact to light and glare based on nighttime lighting and building materials. As discussed in Mitigation Measure No. 32, buildings of the JAMF Master Plan are to be designed to blend in with the surrounding business park uses. Construction of the jail building would not include much glass or highly reflective surfaces in the design due to security concerns. Lighting for the facility would be confined to the site as required in Mitigation Measure No. 41 and would be shielded by landscaping and fencing. Therefore, the JAMF Master Plan would not have a cumulatively considerable contribution to the light and glare impacts cited in the Lake Forest Program EIR.

Agricultural Resources. As previously discussed in Section 4.2, agricultural operations have been phased out at JAMF. This impact, the loss of agricultural resources and activities, is considered to be a significant unavoidable adverse impact of the project both as part of the project impacts and on a cumulative basis. Mitigation was considered, but was found to be infeasible.

2030 Traffic. As previously discussed in Section 4.7, the previous MCAS El Toro is now the Great Park, a planned community with residential, commercial, business, and regional park uses in Irvine. In addition to the Great Park, land use changes at the seven Lake Forest properties and the approved extension of Alton Parkway between Irvine Boulevard and Towne Centre Drive have altered the assumed future traffic conditions of EIR 564. The traffic analysis has included the assumptions and numbers based on these land use changes, which are in the vicinity of the project, for the future traffic numbers. It should be noted that aside from the Great Park and the Lake Forest Opportunities Study land use changes, there are not many other growth or development opportunities in the vicinity of the JAMF. The communities of Lake Forest and Irvine are otherwise built out in the project area, and very little growth is projected for the area north of the JAMF site.

The 2030 plus project LOS were presented previously in Section 4.7 and are reproduced in Table 5.D. The table includes future projected traffic from the Great Park and the Opportunities Study. The analysis, as explained in Section 4.7.2, is based on and includes the projects that could influence traffic in the area surrounding the JAMF site. As shown in Table 5.D, four study area intersections are forecast to operate at unsatisfactory LOS (LOS E) according to City of Irvine and Lake Forest standards. However, the ICUs do not increase by more than 0.01 with implementation of the project. The increase in traffic is not considered a cumulatively considerable contribution of traffic. Therefore, no significant cumulative impacts are created as a result of the build out of the proposed JAMF expansion.

Short-term Air Quality. Construction activities produce combustion emissions from various sources such as utility engines, on-site heavy-duty construction vehicles, equipment hauling materials to and from the site, asphalt paving, and motor vehicles transporting the construction crew. Exhaust emissions from construction activities envisioned on site would vary daily as construction activity levels change. The use of construction equipment on site would result in localized exhaust emissions.

Construction activities associated with development occurring on the project site would temporarily increase localized PM_{10} , ROC, NO_X , and CO concentrations in the project vicinity. The primary sources of construction-related ROC and NO_X emissions are gasoline- and diesel-powered, heavyduty mobile construction equipment such as scrapers and motor graders. Primary sources of PM_{10} emissions would be clearing activities, excavation and grading operations, construction vehicle traffic on unpaved ground, and wind blowing over exposed earth surfaces.

Emissions generated from construction activities are anticipated to cause temporary increases in pollutant concentrations that could contribute to the continuing violations of the federal and State maximum concentration standards. The frequency and concentrations of such violations would depend on several factors, including the soil composition on site, the amount of soil disturbed, wind speed, the number and types of machinery used, the construction schedule, and the proximity of other construction and demolition projects. Since this project consists of modifications to the existing industrial building and site, the construction equipment required will be much less than what is usually used for conventional warehouse construction.

The CalEEMod model was used to calculate the construction emissions, as shown in Tables 5.I through 5.K. While not all details of the construction schedule are known, only 1.1 ac will be graded, and development of the proposed project site will require a small amount of fill along the west-facing screen wall. Rough and final grading will occur prior to construction of any infrastructure.

Using an estimated schedule to characterize construction of the project, Table 5.I in Section 5.8 shows the daily construction emissions. These emissions assume that all standard construction control measures will be implemented, such as SCAQMD Rule 403 for dust control. Table 5.I shows that it is not expected for any of the SCAQMD daily emissions thresholds to be exceeded during construction. Refer to Appendix D for construction analysis details. It is also assumed that the construction phases do not overlap. The Alton Parkway Extension construction has been completed prior to the commencement of construction of the JAMF Master Plan Phase I.

Operational Air Quality. The proposed jail area source emissions include the combustion of natural gas for heating and the use of landscape maintenance equipment. Approximately 2,280 beds will be provided in Phase I in 2014 (i.e., the addition of 1,024 beds from existing conditions). The added 1,024 beds are expected to result in 737 additional ADT. Assuming the traffic rate from the existing 1,256 beds is the same as the rate used in the Supplemental Traffic Analysis (LSA, April 2009) for Phase I, the total ADT will be 1,641 trips. A summary of 2014 project emissions, a combination of the existing plus Phase I, is shown earlier in Table 5.L, which shows that none of the pollutants will exceed the SCAQMD daily thresholds. Therefore, no significant air quality impact is anticipated, and no mitigation measures would be necessary. The 2014 CalEEMod worksheets are provided in Attachment A of Appendix E.

It is expected that the analysis of construction emissions above will also apply to the General Plan build out, because, while the end result of this phase will be a much larger facility, the daily construction operations characterized above for Phase I will apply throughout the construction of all of the proposed jail expansion.

Future General Plan build-out (2030) project emissions were shown earlier in Table 5.M. The 2030 CalEEMod worksheets are provided in Attachment A of Appendix E. Under the build-out condition, the total number of beds provided on site is 7,584 (which includes the bed count from existing and Phase I, the Sheriff's Station and Interim Care Facility), consistent with the maximum number of beds analyzed and approved in EIR 564. This is expected to result in 5,457 ADT. As shown in Table 5.M, none of the pollutants will exceed the SCAQMD daily thresholds. Therefore, no significant air quality impact is anticipated, and no mitigation measures would be necessary.

Water Quality – Pesticides. The JAMF Master Plan includes two detention basins to address runoff on the project site. In addition, the cessation of agricultural activities on the project site is resulting in the overall reduction of contributions to pesticides in the watershed from the JAMF site. While there is some landscaping in the JAMF Master Plan that would require upkeep with the limited use of both fertilizer and pesticides, it would not be to the extent required by the prior agricultural operations on the site. Therefore, development of the JAMF Master Plan would have a slightly beneficial cumulative impact with regard to water quality.

Future Traffic Noise. The JAMF Master Plan would not generate enough traffic to result in impacts to future traffic noise. Under the build-out condition, the total number of beds provided on site is 7,584 (which includes the bed count from existing and Phase I, the Sheriff's Station and Interim Care Facility), consistent with the maximum number of beds analyzed and approved in EIR 564. This is expected to result in an additional 5,457 ADT in 2030. Based on the trip distribution (Figure 5-2 shown earlier), the majority (73 percent) of the trips divide almost equally between Alton Parkway and Bake Parkway. This results in just under 2,000¹ trips on the two main arterials in the JAMF area. Future (2025) ADT for Bake Parkway is 37,000 and ADT for Alton Parkway is 50,000.² The contribution to noise, based on ADT, would result in a 0.2 dB increase, which is an inaudible increase. Therefore, the project could not have cumulative considerable contributions to traffic noise and thus would not have significant cumulative impacts.

Population Growth. The build out of the JAMF facility has been approved for over 12 years. The JAMF Master Plan will provide job opportunities; however, these job opportunities would not exceed regional projections for Orange County. The project would not contribute to any population growth. Therefore, the project would not have any cumulatively significant population growth impacts.

Greenhouse Gas Contribution. Refer to Section 4.3 for a detailed discussion regarding GCC and GHG contribution.

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¹ 5,457 (.073) is 1991.

² EIR 585 Table 5-1, which took into account the build out of the JAMF.

Consistent with the previous analysis of cumulative impacts in EIR 564, the JAMF Master Plan would not have cumulatively considerable contributions to any environmental parameter that would result in significant cumulative impacts.

5.17.5 Findings Related to Cumulative Impacts

No New Significant Effects Requiring Major EIR Revisions. Based on the foregoing analysis and information, there is no evidence that changes in circumstances or setting necessitate a major change to EIR 564. Changes in circumstances and setting will not result in new significant environmental impacts related to cumulative impacts, nor is there a substantial increase in the severity of impacts described in EIR 564.

No Substantial Change in Circumstances Requiring Major EIR Revisions. There is no information in the record or otherwise available that indicates that there are substantial changes in circumstances pertaining to cumulative impacts that would require major changes to EIR 564.

No New Information Showing Greater Significant Effects than EIR 564. This environmental analysis has analyzed all available relevant information to determine whether there is new information that was not available at the time EIR 564 was certified, indicating that a new significant effect not reported in that document may occur. Based on the information and analyses above, there is no substantial new information indicating that there will be a new significant impact related to cumulative impacts requiring major revisions to EIR 564.

No New Information Showing Ability to Reduce Significant Effects in Previous EIR. There are no alternatives to the project or additional mitigation measures that would substantially reduce one or more significant impacts pertaining to cumulative impacts identified in and considered in EIR 564.